Quelle TECHNISCHER KUNDENDIENST

Technische Unterlage

VTC CD-VU4085

Best.-Nr.:

038.035.2
038.036.0
038.037.8
038.038.6

SPECIFICATIONS

AV MASTER AMPLIFIER section

- **When SURROUND is OFF**
  FRONT : 2ch × 45W (8Ω), 0.09% (1KHz)
  Input Sensitivity Impedance : AUX : 250mV/20kΩ
  Frequency Response : AUX : 20~80KHz (-3dB)
  Channel Speration : 50dB
  S/N Ratio : AUX (IHF-A) : 85dB

- **When DOLBY PRO LOGIC is ON**
  FRONT : 2ch × 20W (8Ω), 0.09% (1KHz)
  CENTER : 1ch × 20W (8Ω), 0.09% (1KHz)
  REAR : 2ch × 10W (8Ω), 0.9% (1KHz)
  Frequency Response : CENTER : 20~80KHz (-3dB)
  REAR : 100~8KHz (-3dB)
  S/N Ratio : CENTER : 85dB
  REAR : 60dB
  Power Consumption : 210W
  Power Requirements : AC 230V, 50Hz
  Dimensions (W × H × D) : 275 × 107 × 280mm
  Weight : 6.2kg

TUNER Section

- **FM SECTION**

Frequency Range	: 87.5~108MHz
Sensitivity (S/N 30dB)	: 3.0μV (75Ω)
Total Harmonic distortion	: MONO : 0.2%
	STEREO : 0.4%
S/N Ratio	: MONO : 70dB
	STEREO : 65dB

- **AM SECTION**

Frequency Range	: 522~1620KHz
Sensitivity	: 600μV
Total Harmonic distortion	: 2.0%
Dimensions(W × H × D)	: 275 × 94 × 294mm
Weight	: 2Kg

CASSETTE DECK Section

Track System	: 4-track, 2-channel stereo
Recording System	AC bias
Erasing System	: AC erasing
Tape Speed	: 4.8cm/sec
Motors	: DC motor
Frequency Response	: Normal : 40~14,000Hz
	CrO2 : 40~15,000Hz
	Metal : 40~16,000Hz
FF and REW	: 120 sec(C-60 tape)
Wow and Flutter	: 0.25% (JIS, WRMS)
S/N Ratio	
Dolby OFF : 55dB (CCIR/ARM)	
Dolby B ON : 65dB (CCIR/ARM)	
Dolby C ON : 75dB (CCIR/ARM)	
Dimensions (W × H × D)	: 275 × 107 × 280mm
Weight	: 2.7Kg

COMPACT DISC PLAYER Section

- **AUDIO**

Channel	: 2 ch
Frequency Response	: 20~20,000Hz ± 2.5dB
S/N Ratio	: 90dB (IHF-A Filter)

- **SIGNAL**

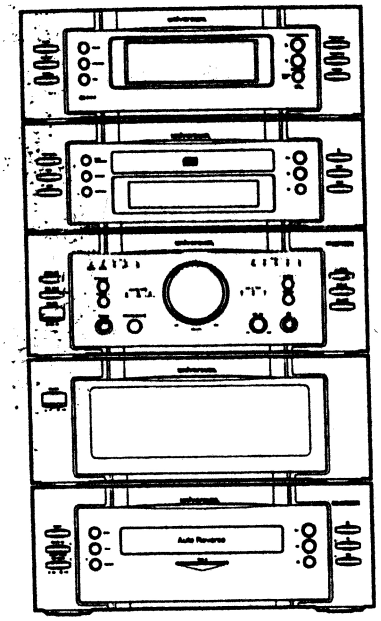
Sampling Frequency	: 44.1KHz
Error Condition Method	: CIRC
Decording D/A	: 16 bit Linear

Low Bandwidth Filter : 8 times oversampling digital filter

- **PICK-UP**

Method : Non-contact optical reading

Source of light	: Semiconduct Laser
Wave Length of light	: 780nm
Dimensions(W × H × D)	: 275 × 94 × 280mm
Weight	: 2.4Kg



UTS-Nr.:	999	QUELLE
Best.Nr.:	0380352/01	
Ger.Bez.:	UNIVERSUM-BAUSTEIN-ANLAGE	

GKz:	G	GERAET
WGT:	650	MICRO-/MINI-ANLAGEN
KD-Sektor:	R	RUNDFUNK
BaumNr.:	00	KEIN DIAGNOSEBAUM VORHANDEN
Klassierung:	STG	STEREOG., TUNER, VERST., STEUERG
IFW-FehlerGru.:	205	RDF.,VERST.,TB.,PHONO,CD,CB
Type/Privileg/Universum.Nr		VTC-CD-VU4085
Beschreibung		5 BAUSTEINE
VK-Preis: 998.00		

Serviceart:	01	QUELLE-TKD
Garantie fuer Kunden	06	Monate
Sondervereinbarungen:	0	SIEHE SERVICEART

CAUTION	INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM
VARO!	AVATTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASER SÄTEILYLLE ÄLÄ KATSO SÄTEESEEN
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD SÄTRÄNTA EJ STRÅLEN
ADVERSEL	USYNLIG LASERSTRÅLING VED ÅBNING UNDGÅ UNDGÅELSE FOR STRÅLING
DANGER	INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM
VORSICHT	UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN

SHOCK, FIRE HAZARD SERVICE TEST:

CAUTION: After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chases bottom.
Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before return to user/customer.
Ref.UL Standard NO.1492.

NOTE ON SAFETY:

Symbol ⚠ : Fire or electrical shock hazard. Only original parts should be used to replace any part with symbol ⚠ Any other component substitution(other than original type), may increase risk or fire or electrical shock hazard.

CLASS 1 LASER PRODUCT

Leisten Sie einen Beitrag zum Umweltschutz

- Verbrauchte Batterien und Akkumulatoren (Akkus) gehören nicht in den Hausmüll.
- Sie können sie bei einer Sammelstelle für Altbatterien bzw. Sondermüll abgeben.
- Informieren Sie sich bitte bei Ihrer Gemeinde.
- Batterien und Akkus mit dem Recyclingsymbol können Sie auch in den Quelle-Verkaufsstellen Agenturen und TKD-Stellen abgeben.

Umwelthinweise

Wenn dieses MIDI-BAUSTEINSET eines Tages ausgedient hat, sollten Sie es nicht einfach in den Hausmüll werfen. Sicher gibt es in Ihrer Gemeinde einen Wertstoff- oder Recyclinghof, über den Altgeräte angenommen und einer Verwertung zugeführt werden.

☞ Machen Sie sich diese kleine Mühe - unserer Umwelt zuliebe.

** PE für Polyetylen
PP für Polypropylen

PS für Polystyrol
02 = PE-HD
04 = PE-LD

WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.
Keep components and tools also at this potential.

ESD

ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).
Leur longévité pourrait être considérablement accurtes par la fait qu'aucune précaution n'est prise à leur manipulation.
Lors de reparations s'assurer de bien être relié au même potentiel que la masse de l'appareil et ceder le bracelet serti d'une résistance de sécurité.
Veiller à ce que les composants ainsi que les outils aussi on utilisé soient également à ce potentiel.

WARNUNG

Alle IC und viele andere Halbleiter sind empfindlichen gegen elektrostatischen Entladungen (ESD).
Unsorgfältige Behandlung bei der Reparatur kann die Lebensdauer drastisch vermindern.
Sorgen sie dafür, das Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind.
Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

Quelle Schickedanz AG & Co.
Kundendienstzentralleitung Duisburger Str. 57, 90451 Nürnberg

Bei allen Reparaturen sind die gültigen Sicherheitsvorschriften zu beachten

Nachdruck nicht gestattet
Änderungen vorbehalten

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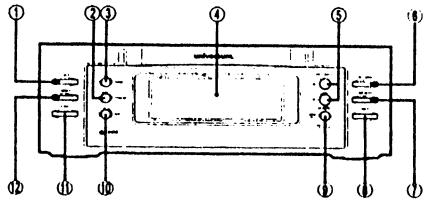
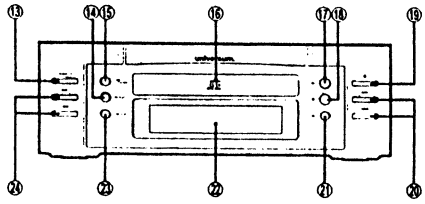
Bedienungselemente

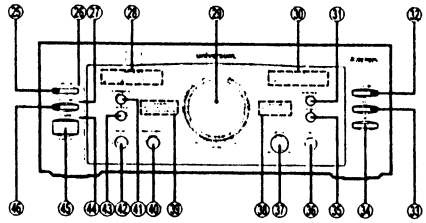
RDS-Tuner



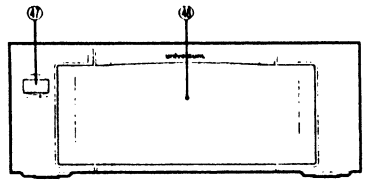
CD-Spieler



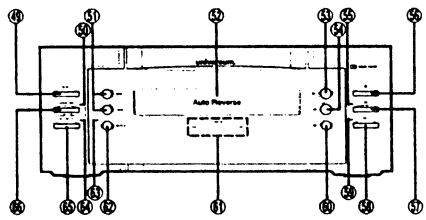
Verstärker



VU-Meter



Cassettendeck



Bedienungselemente und Funktionen

VU-Meter

⑰ **RANGE** = Ändern der Empfindlichkeit
⑱ VU-Pegelanzeigen

Cassettendeck

⑲ **RESET** = Bandzählwerk zurückstellen
⑳ Anzeige für **DOLBY NR.** rot / grün
㉑ ◄◄ = schneller Cassettenrücklauf Seite „B"
►► = schneller Cassettenvorlauf Seite „A"
㉒ Cassettenschublade
㉓ ► = Wiedergabe von Seite „A"
㉔ ◄ = Wiedergabe von Seite „B"
㉕ Anzeige für PAUSE-Funktion
㉖ ▲ = Öffnen/Schließen der Cassettenschublade
㉗ II = Pausetaste
㉘ **REC** = Aufnahmetaste
㉙ Funktionsanzeige für Aufnahme
㉚ ■ = Stopptaste
㉛ ◁/▷ Laufrichtungsanzeigen; die jeweilige Laufrichtung der Cassette wird angezeigt
㉜ **REPEAT** = Wiederholautomatik
㉝ Anzeige für REPEAT-Funktion
㉞ Anzeige für REV MODE-Funktion
㉟ **REV MODE** = Wahl der Cassettenwiedergabe
㊱ **DOLBY NR.** = Rauschunterdrückungssystem

Bedienungselemente und Funktionen

RDS-Tuner

① **TIMER** = Aufrufen der Uhr- oder Timerzeit
② **ST/MONO** = STEREO/MONO-Umschaltung
③ **FM/AM** = Wahl des Frequenzbereichs;
FM = UKW
AM = Mittelwelle
④ **Tunerdisplay**
⑤ ▲ **TIME/TUNING/CH** = Einstellen der Zeit oder Frequenz nach oben (höhere Frequenzen)
▼ **TIME/TUNING** = Einstellen der Zeit oder Frequenz nach unten (niedrigere Frequenzen)
⑥ **FREQ MODE** = Wahl der Frequenzeinstellung; automomatisch/manuell oder Aufrufen der gespeicherten Sender
⑦ **TIME MODE** = Einstellen der Uhr-/Alarmzeit
⑧ **CANCEL** = Löschen der gespeicherten Sender
⑨ **MEMO/SET-AUTO/MANUAL** = Automatische/manuelle Senderspeicherung
⑩ **RDS** = Radio Data System-Funktionen einschalten und wählen
⑪ **SLEEP** = Wählen der automatischen Ausschaltzeit
⑫ **DIMMER** = Einstellen der Anzeigehelligkeit für Tuner und CD-Spieler

CD-Spieler

⑬ **PROGM/CLR** = Speichern der CD-Titel und Löschen der Programmierung
⑭ **REPEAT** = Wiederholautomatik eines/aller Titel
⑮ **TIME/COUNTER** = Umschalten von Zeit- auf Zählwerksanzeige
⑯ CD-Schublade
⑰ ► = Wiedergabetaste für CD
⑱ ■ = CD-Wiedergabe beenden
⑲ ▲ = Öffnen der CD-Schublade

⑳ **SURROUND M.** = Wahl des Klangbildes
DOLBY PRO LOGIC = 5-Kanal-Wiedergabe
DOLBY 3 STEREO = 3-Kanal-Wiedergabe
Raumklangwahl **HALL**
Raumklangwahl **THEATER**
Raumklangwahl **LIVE**
㉑ **PHONES** = Kopfhörerbuchse 6,3 mm Ø

㉒ ►►I = Titelwahl vorwärts/
I◄◄ = Titelwahl rückwärts
㉓ II = CD-Pause
㉔ CD-Spielerdisplay
㉕ **RANDOM** = Wiedergabe einer Zufallsreihenfolge
㉖ ◄◄ = Suchlauf rückwärts/
►► = Suchlauf vorwärts

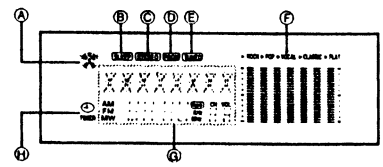
Verstärker

Die Funktionsanzeigen erscheinen im Tunerdisplay ④
㉗ **SURROUND** = Dolby Surround-Funktion ein-/ausschalten
㉘ Anzeige für eingeschaltete **SURROUND**-Funktion
㉙ Anzeige für eingeschaltete **TEST-TON**-Funktion
㉚ **SURROUND MODE** = Anzeige der gewählten Surround-Funktion
㉛ **VOL** = Lautstärkeregler, Gesamtlautstärke
㉜ **FUNCTION** = Anzeigen für die gewählte Funktion
㉝ **BASS/TREBLE** = Einstellen der Tiefen/Höhen um +/- 10 dB
㉞ **FUNCTION** = Wahl der Betriebsart
TUNER = Rundfunk
TAPE = Cassettenbetrieb
CD = CD-Wiedergabe
AUX = Wiedergabe von Zusatzgeräten
MD = Tonwiedergabe von einem MD-Gerät
㉟ **DISPLAY** = Wahl der Klangbilddarstellung
㊱ **EQ-MODE** = Wahl des Klangbildes
㊲ **BALANCE** = Lautstärkeausgleich rechter/linker Kanal
㊳ **MIC** = Mikrofonanschluß 6,3 mm O
㊴ **MIC VOL** = Mikrofonmischregler
㊵ **DELAY TIME** = Anzeige S/M/L
㊶ **CENTER MODE** = Anzeige der Center-Betriebsart
㊷ **IR SENSOR** = Fernbedienungsempfänger

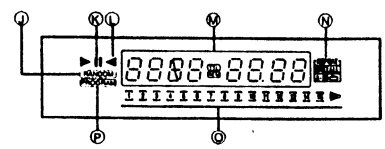
㊸ **CENTER M.** = Wahl der Center-Betriebsart
㊹ Bereitschaftsanzeige **ON/STANDBY**
Bereitschaft = rot
Eingeschaltet = grün
㊺ **POWER** = Netzschalter
㊻ **TEST TONE** = Signal zur Abstimmung aller Pegel

Funktionsanzeigen im Tuner/CD-Spielerdisplay

RDS-Tunerdisplay



CD-Spielerdisplay



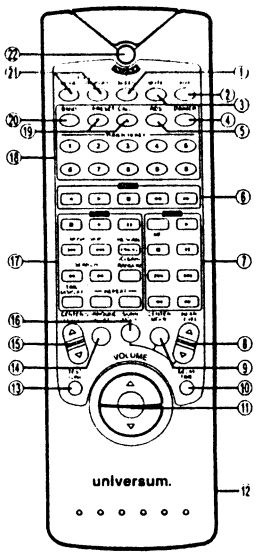
RDS-Tunerdisplay

Ⓐ Surround-Anzeige
Ⓑ **SLEEP** Anzeige
Ⓒ **STEREO** Anzeige
Ⓓ **PRGM** = Senderprogramm-Anzeige
Ⓔ **TUNED** = Optimale Sendereinstellung
Ⓕ **EQ MODE** = Anzeige der Equalizer-Charakteristik **ROCK - POP - VOCAL - CLASSIC** und **FLAT**
Ⓖ Funktion-, Sendernamen-, PTY-, Frequenz-, Zeit-, Balance, Bandzählwerkanzeige
REAR LEVEL = Lautstärkeeinstellung für rückseitige Lautsprecherboxen
CENTER LEVEL = Lautstärkeeinstellung für Mittellautsprecher
BASS = Einstellen der Basswerte
TREBLE = Einstellen der Höhen
Ⓗ ◷ *TIMER* = Timer-Funktionsanzeige

CD-Spielerdisplay

Ⓘ **RANDOM** = Wiedergabe einer Zufallsreihenfolge
Ⓙ ► = Anzeige für CD-/Cassetten-Wiedergabe
Ⓚ II = Anzeige der Pausefunktion
Ⓛ ◄ = Cassettenwiedergabe im Reverse-Mode
Ⓜ Spielzeit-/Titelnummernanzeige
Ⓝ Anzeige der gewählten Repeatfunktion
Ⓞ Titelnummernanzeige in Balkenform
Ⓟ **PROGRAM** = Anzeige für Wiedergabe einer Programmreihenfolge

Fernbedienung



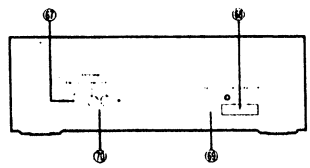
Bedienungselemente und Funktionen

❶ **SLEEP** = Wählen der automatischen Ausschaltzeit
❷ Funktionstaste **AUX**
❸ **MUTE** = Absenken der Lautstärke
❹ **DIMMER** = Einstellen der Anzeigehelligkeit
❺ **RDS** = Wählen der RDS-Betriebsart
❻ **Funktionstasten für Cassettenbetrieb**: ◀/▶ = Cassettenwiedergabe Seite „A" oder „B", ◀◀ = Suchlauf vorwärts, ▶▶ = Suchlauf ruckwärts; ■ = Stopp; II = Pause

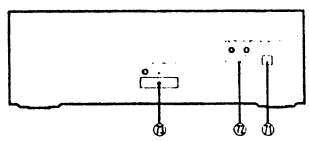
❼ Funktionstasten für den MD Recorder
POWER = MD Ein- bzw. Ausschalten;
▶ = MD-Wiedergabe;
■ = MD-Stop; II = CD-Pause;
I◀◀ = Suchlauf rückwärts; ▶▶I = Suchlauf vorwärts; I◀◀= Titelwahl rückwärts, ▶▶ = Titelwahl vorwärts
❽ **REAR LEVEL** = Lautstärkeeinstellung für hintere Lautsprecher
❾ **CENTER MODE** = Wahl der Center-Betriebsart
❿ **DELAY** = Einstelltasten für die Zeitverzögerung
⓫ **VOLUME - / +** = Lautstärkeeinstellung
⓬ Batteriefach (Rückseite) für 2x 1,5 V
⓭ **TEST TONE** = Signal zur Abstimmung aller Pegel
⓮ **SURROUND** = Surround-Funktion Ein-/Ausschalten
⓯ **CENTER LEVEL** = Lautstärkeeinstellung für Center- Lautsprecher
⓰ **SURR MODE** = Ein-/Ausschalten der SURROUND-Funktion
⓱ **Funktionstasten CD-Spieler:**
■ = CD-Stopp; ▶ = CD-Wiedergabe;
II = CD-Pause;
MUSIC SKIP I◀◀ = Titelwahl rückwärts;
▶▶I = Titelwahl vorwärts;
PROG (CLEAR) = Speichern der CD-Titel/Löschen der Programmierung;
SEARCH ◀◀ = Suchlauf rückwärts;
▶▶ = Suchlauf vorwärts
RANDOM = Zufallswiedergabe;
TIME DISPLAY = Umschalten der Spielzeitanzeige;
REPEAT 1/ALL = Wiederholautomatik,
A-B = Wiederholung
⓲ **1 - 0** = Aufrufen der Senderspeicher/ CD-Titel
⓳ **PRESET CALL** = Aufrufen der gespeicherten Sender
⓴ **BAND** = Wählen des Frequenzbereichs **FM** (UKW) oder **AM** (Mittelwelle)
㉑ **EQ MODE** = Wahl des Klangbildes
㉒ **POWER** = Einschalten der Anlage aus Bereitschaft

Anschlüsse der Geräterückseite

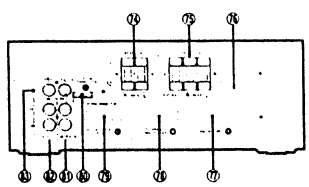
RDS-Tuner



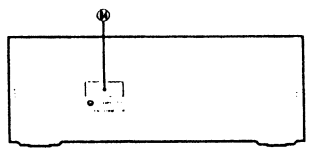
CD-Spieler



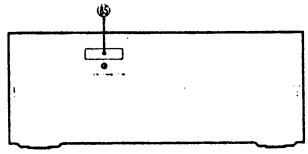
Verstärker



VU-Meter



Cassettendeck



Technische Daten

Netzanschluß:
230 V ~ +6 /-10% 50 Hz
Leistungsaufnahme:
210 Watt
Abmessungen in cm ca.
Breite 27,5 /Höhe 22,5 /Tiefe 27

Verstärkerteil
Maximale Ausgangsleistung:
2x 300 Watt bei Stereobetrieb
Lautsprechermindestimpedanz:
8 Ohm (Anschlußwert)
Übertragungsbereich:
von 40 Hz - 16 kHz 1,5 dB
Übersprechdämpfung:
30 dB bei 1000 Hz

Pro-Logic-Betrieb
Ausgangsleistung:
2x 200 Watt
Hauptlautsprecher
2x 50 Watt Surround links/ Surround rechts
1x 90 Watt Center-Kanal

Frequenzgang:
Dolby Surround 100Hz - 7kHz,
Matrix 20 Hz - 20 kHz
Hall 100 Hz - 7 kHz

Signal/Rausch-Verhältnis (im Surround-Betrieb):
>75 dB
Verzögerungszeit:
20 ms; im Dolby-Betneb auf 15 und 30 ms umschaltbar
Verzögerungsverfahren:
digital
Eingangsempfindlichkeit (Line-IN):
250 mV
Eingangsimpedanz:
47 kΩ

Maximale Eingangsspannung:
3,5 V
Betriebsarten:
Dolby Pro Logic, Dolby 3 Stereo, Hall, Demo und Live
REAR = Lautsprecheran 8 - 16 Ω
CENTER = Lautsprecheran 8 Ω

Tunerteil
FM-Bereich (UKW)
87.5 - 108 MHz
Empfindlichkeit: 6 µV
Hub: 22.5 kHz
und S/R - 26 dB: 40 kHz
Hub - 46 dB S/R: 40 µV
Fremdspannungsabstand: >50 dB
Pilotunterdrückung:
19 kHz = 40 dB
38 kHz = 50 dB
MW-Bereich
MW 521 - 1620 kHz
Empfindlichkeit für MW 1500 µV
26 dB S/N:

Cassettenteil
Übertragungsbereich Aufnahme und Wiedergabe:
(-8 dB) 63 Hz - 12500 Hz
Geschwindigkeitsabweichung: 1.0 %
Tonhöhenschwankung: 0.3 %
Tonband: Normal-Cassetten/Chrom (Eisenoxid, Fe_2O_3)/CrO_2
Geräuschspannungsabstand: 50 dB
Löschdämpfung: 70 dB

CD-Spieler
Optischer Tonabnehmer:
3-Strahlen-Laser
Fehlerkorrektur: CIRC
D/A-Umwandler:
16-Bit-linear mit 8-fach Oversampling

RDS-Tuner
⓫ **FM 75 Ω** (UKW) = Antennenbuchse
⓬ **SYSTEM CONNECTOR Ⓐ** = Anschluß für Tuner-Systemsteuerung
⓭ **RESET** = Speicherrückstelltaste
⓮ **AM LOOP** = Antennenanschlüsse für Mittelwellen-Rahmenantenne

CD-Spieler
⓫ **DIGITAL OUTPUT** = Digitaler Lichtleiterausgang zum Anschluß an ein digitales Aufnahmegerät, z.B. MD-Gerät
⓬ **REMOTE CONTROLL TO MD** = Fernsteueranschluß für MD-Recorder
⓭ **SYSTEM CONNECTOR Ⓑ** = Anschluß für CD-Systemsteuerung (weißer Stekker)

Verstärker
⓮ **MAIN SPEAKER** = Stereolautsprecheranschlüße, Frontlautsprecher
R = rechter Kanal (rot +)
L = linker Kanal (schwarz -)

⓯ **Pro Logic**-Lautsprecheranschlüsse
CENTER = Lautsprecheranschluß (rot +/schwarz -) für Mittellautsprecher
REAR = rückseitiger Lautsprecheranschluß
R = rechter Kanal (rot +/schwarz -)
L = linker Kanal (rot +/schwarz -)
⓰ Netzanschlußkabel 230 V/50 Hz
⓱ **TO AM/FM TUNER Ⓐ** = Systemsteuerungskabel für den Tuner
⓲ **TO COMPACT DISC PLAYER Ⓑ** = Systemsteuerungskabel für den CD-Spieler
⓳ **TO CASSETTE DECK Ⓒ** = Systemsteuerungslabel für das Cassettendeck
⓴ **SYSTEM CONNECTOR Ⓓ** = Systemsteuerungsanschluß für das VU Meter

㉑ **MD-PLAYER IN** = Analoger Eingang eines MD-Spielers (Wiedergabe)
R = rechter Kanal (rot)
L = linker Kanal (weiß)
(**MD** = Mini-Disk)
㉒ **AUX R/L** = Anschluß für Zusatzgerate (Wiedergabe)
R = rechter Kanal (rot)
L = linker Kanal (weiß)
㉓ **REC OUTPUT** = Analoger Ausgang für ein zusätzliches Aufnahmegerät, z.B. MD-Recorder
R = rechter Kanal (rot)
L = linker Kanal (weiß)

VU-Meter
㉔ **SYSTEM CONNECTOR TO AMPLIFIER Ⓓ** = VU-Meter Anschlußkabel zum Verstärker

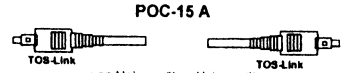
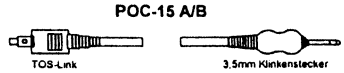
Cassettendeck
㉕ **SYSTEM CONNECTOR Ⓒ** = Anschluß für Cassetten-Systemsteuerung

Hinweise:
Die Verbindungskabel Ⓐ - Ⓑ - Ⓒ - Ⓓ des Verstärkers sind mit den entsprechenden Buchsen Ⓐ - Ⓑ - Ⓒ - Ⓓ der Einzelbausteine zu verbinden.

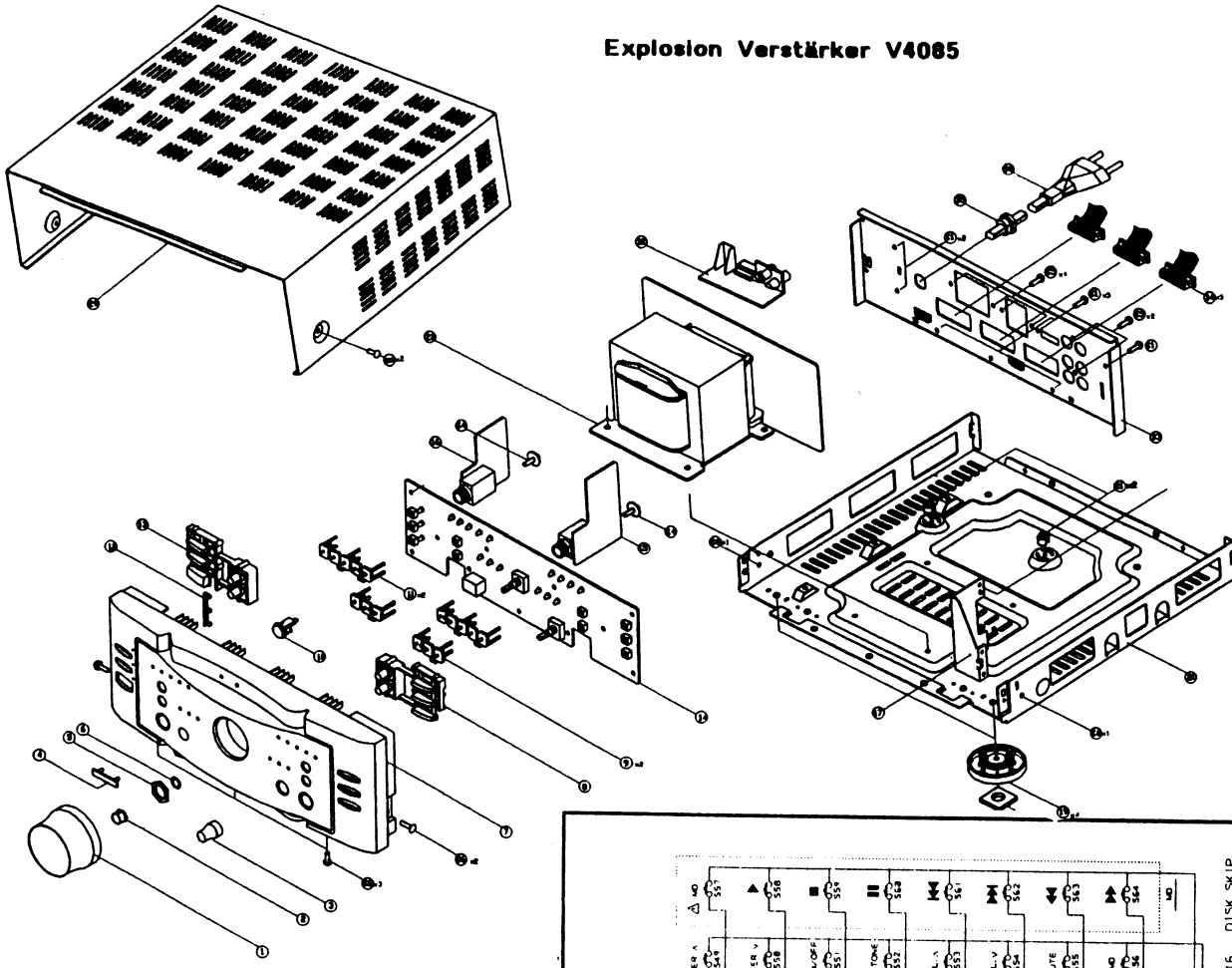
Abschaltautomatik
Dieses Bausteinset besitzt eine Abschaltautomatik, um eine Überlastung des Verstärkerteils zu vermeiden. Hat sich die Anlage automatisch abgeschalten, so schalten Sie mit der Taste **POWER** ㉒ die Anlage ab.

Nach ca. 5 Minuten können Sie die Anlage wieder anschließen und mit der Taste **POWER** ㉒ einschalten.

Lichtleiterkabel

Bild	ET-Nummer
Signal → **POC-15 A**  TOS-Link — TOS-Link von Heimgerät zu Heimgerät	095.299.4 1,5m
Signal → **POC-15 A/B**  TOS-Link — 3,5mm Klinkenstecker von Heimgerat zu Portable	095.300.0 1,5m

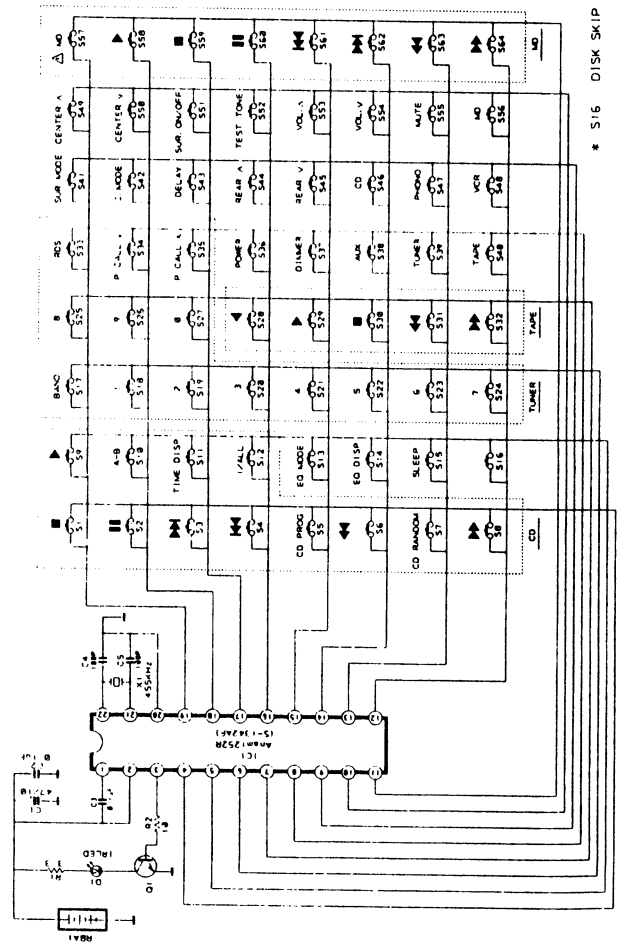
Explosion Verstärker V4085



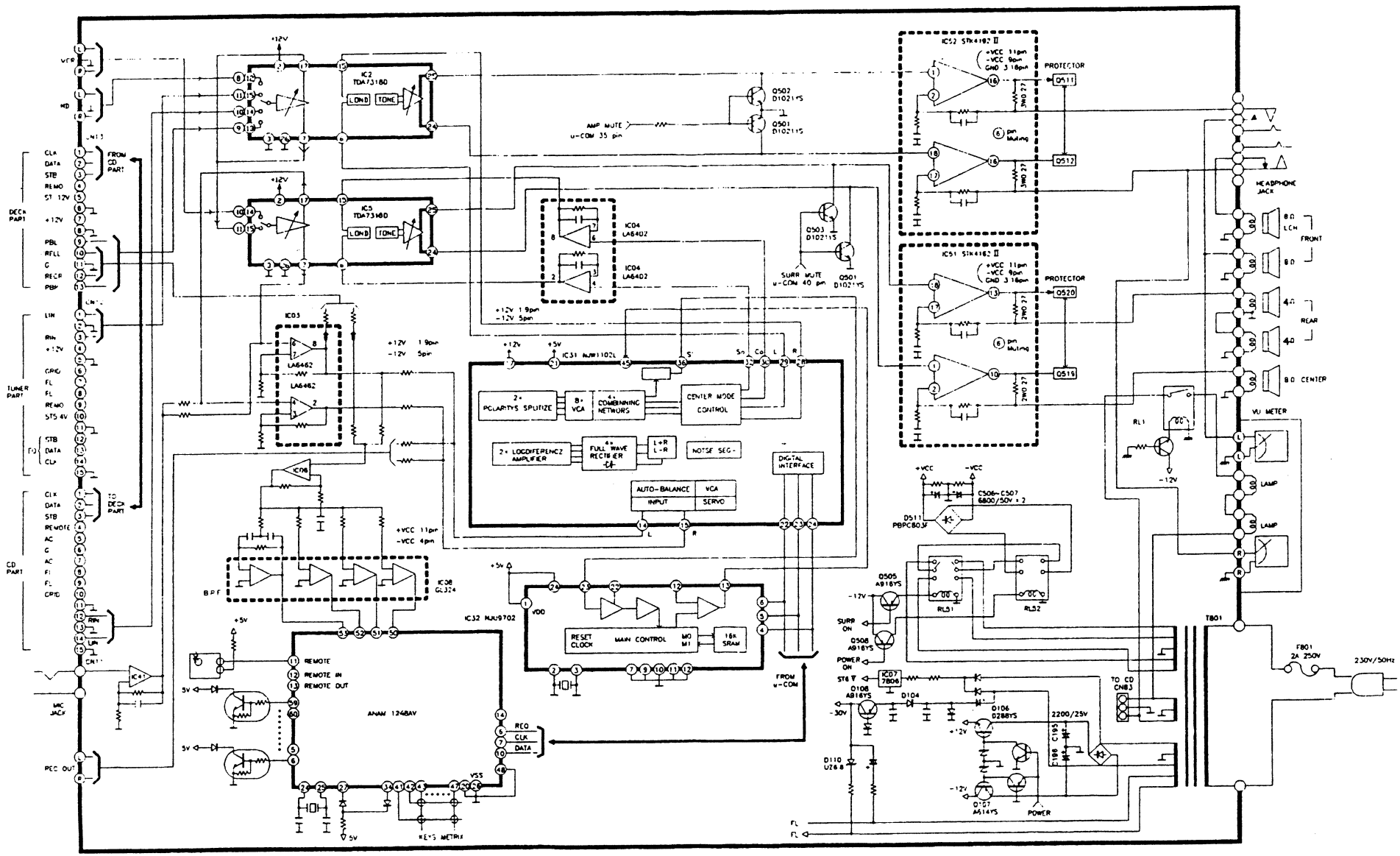
IC71(ANAM1248AV)

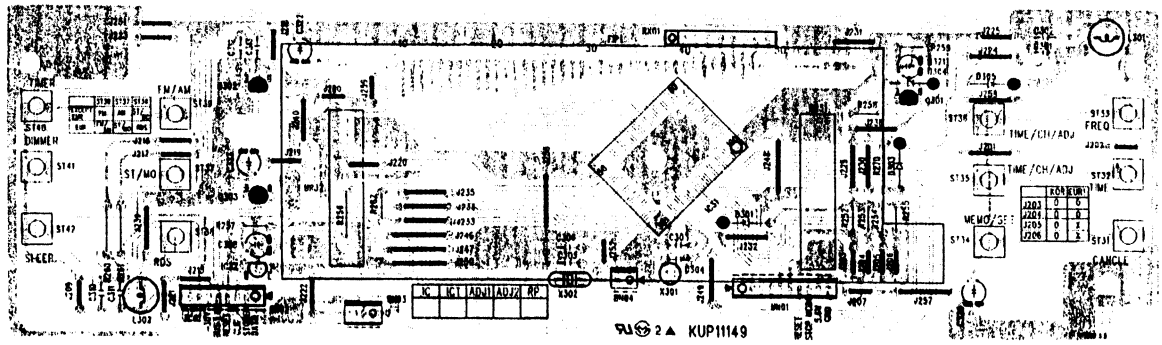
PIN No.	PIN NAME	I/O	DESCRIPTION	REMARK
59~61		I/O	CENTER MODE INDICATOR	
62, 63	$\overline{P70}$~$\overline{P77}$	I/O	62 PIN ON : H, 63 PIN OFF : H	
64	P00~P04	I/O	TEST TONE INDICATOR	
1~7		I/O	SURR ON/OFF, SURR MODE INDICATOR	
8, 9, 10	P05 P07	I/O	DISPLAY CONTROL DATA BUS (8 PIN:REQ, 9PIN:CLOCK, 10 PIN : DATA)	
11	$\overline{INT0}$		SENSOR REMOTE INPUT	
12	INT1		BUS LINE REMOTE INPUT	
13	INT2/TC1		BUS LINE REMOTE OUTPUT	
15, 16	P14, P15	O	15 PIN : DATA, 16 PIN : CLK	FOR TDA7313
17, 18	P16, P17	O	17 PIN : DATA, 18 PIN : CLK	FOR TDA7318
23	$\overline{RESET}$	O	MI COM RESET PORT	
24, 25	XIN, XOUT	I/O	CRYSTAL INPUT/OUTPUT	
27~31	P30~P34	O	FUNCTION LED DRIVE	
32~34	P35~P37	O	DELAY TIME LED DRIVE	
35	P40	O	AMP MUTE PORT	ACTIVE "L"
36	P41	O	POWER ON/OFF PORT	ACTIVE "L"
37, 39, 19	P42, P44, P20	O	EQ DISPLAY (19 PIN:STB, 37 PIN:CLK, 39 PIN:DAT)	TO TUNER MI COM
40	P45	O	SURR MUTE PORT	ACTIVE "L"
41~47	P46,P47,P50~P54	I/O	KEY METRIX	
49	VAREF		V ANALOG REFERENCE PORT	
50~53	P60~P63	I/O	160Hz, 400Hz, 2.5KHz, 6.3KHz, A/D CONVERTOR (EQ. LEVEL)	TO TUNER MI COM
56, 57	P66, P67	I	VR UP/DOWN DATA INPUT	
58	GND		+5V	
20, 26, 48	VSS		GND	

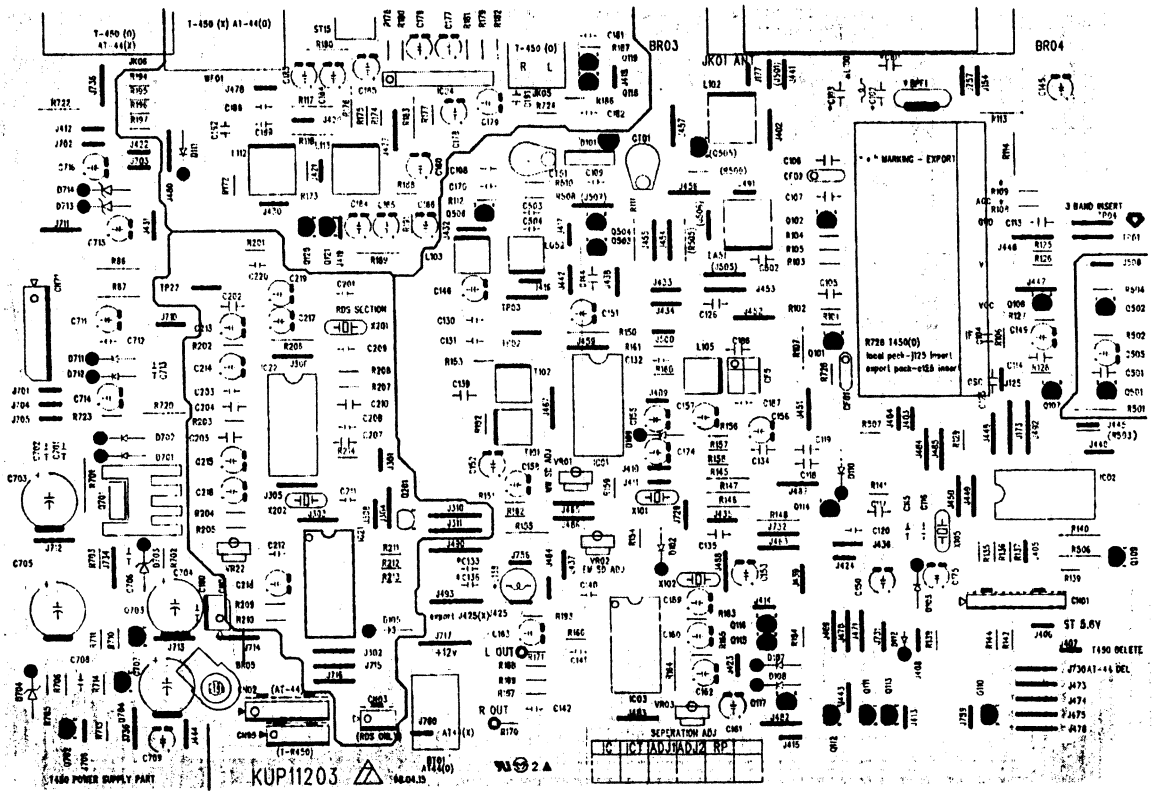
REMOTE CONTROL SCHEMATIC DIAGRAM

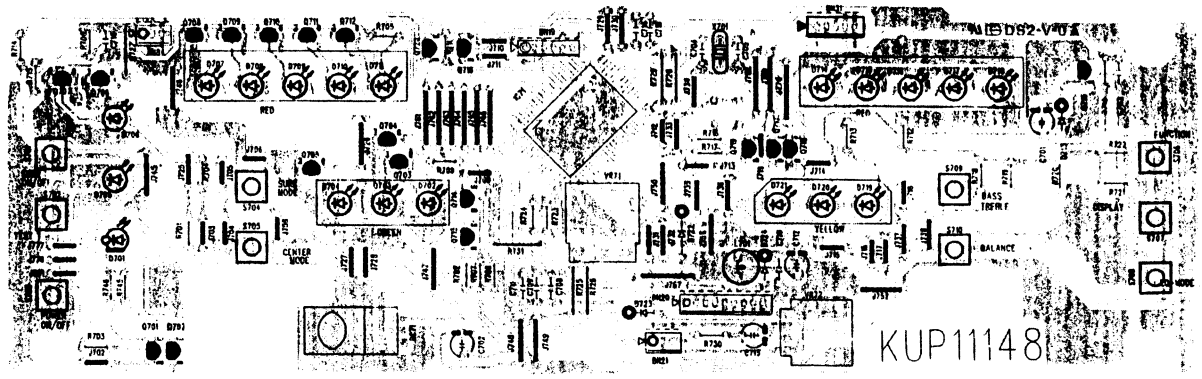


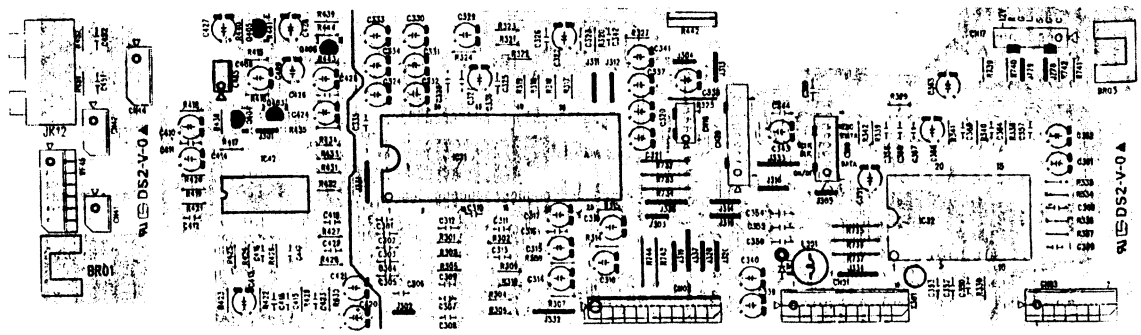
BLOCK DIAGRAM

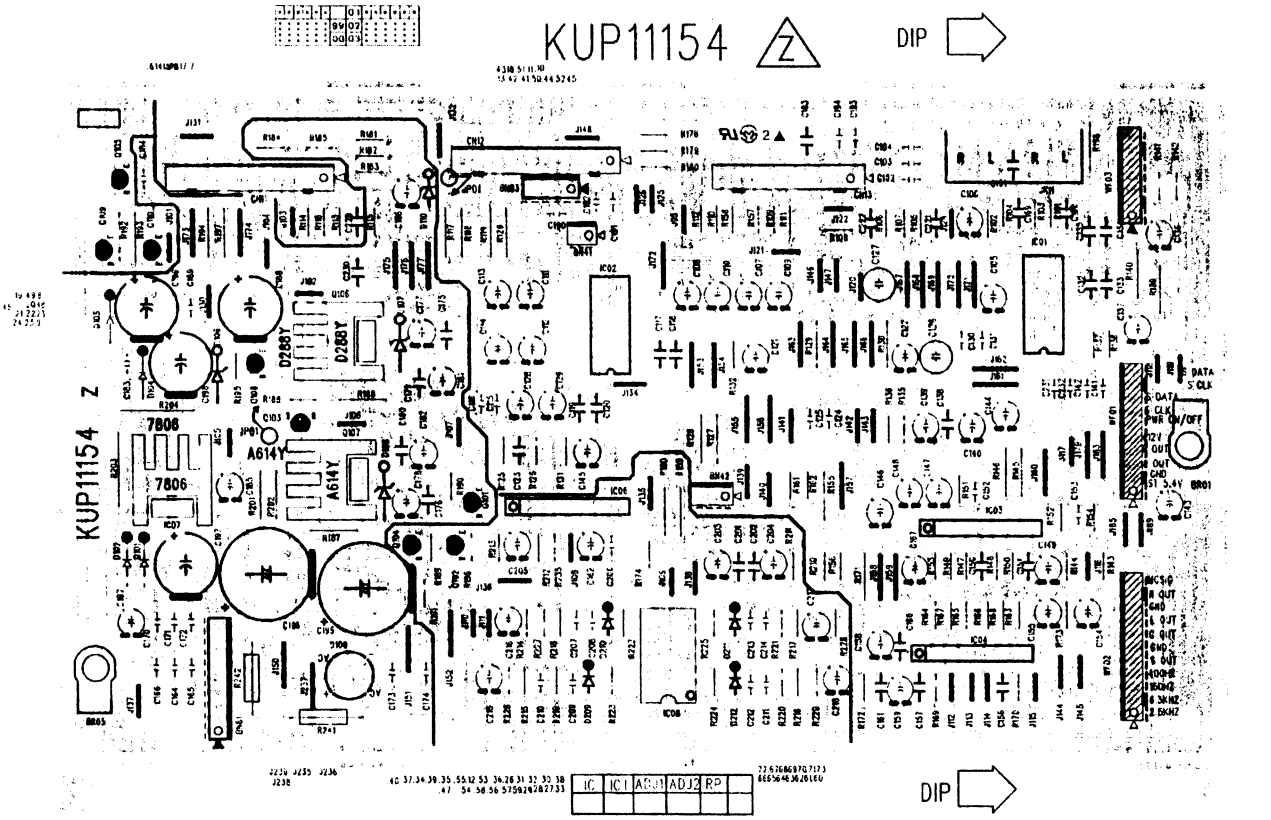


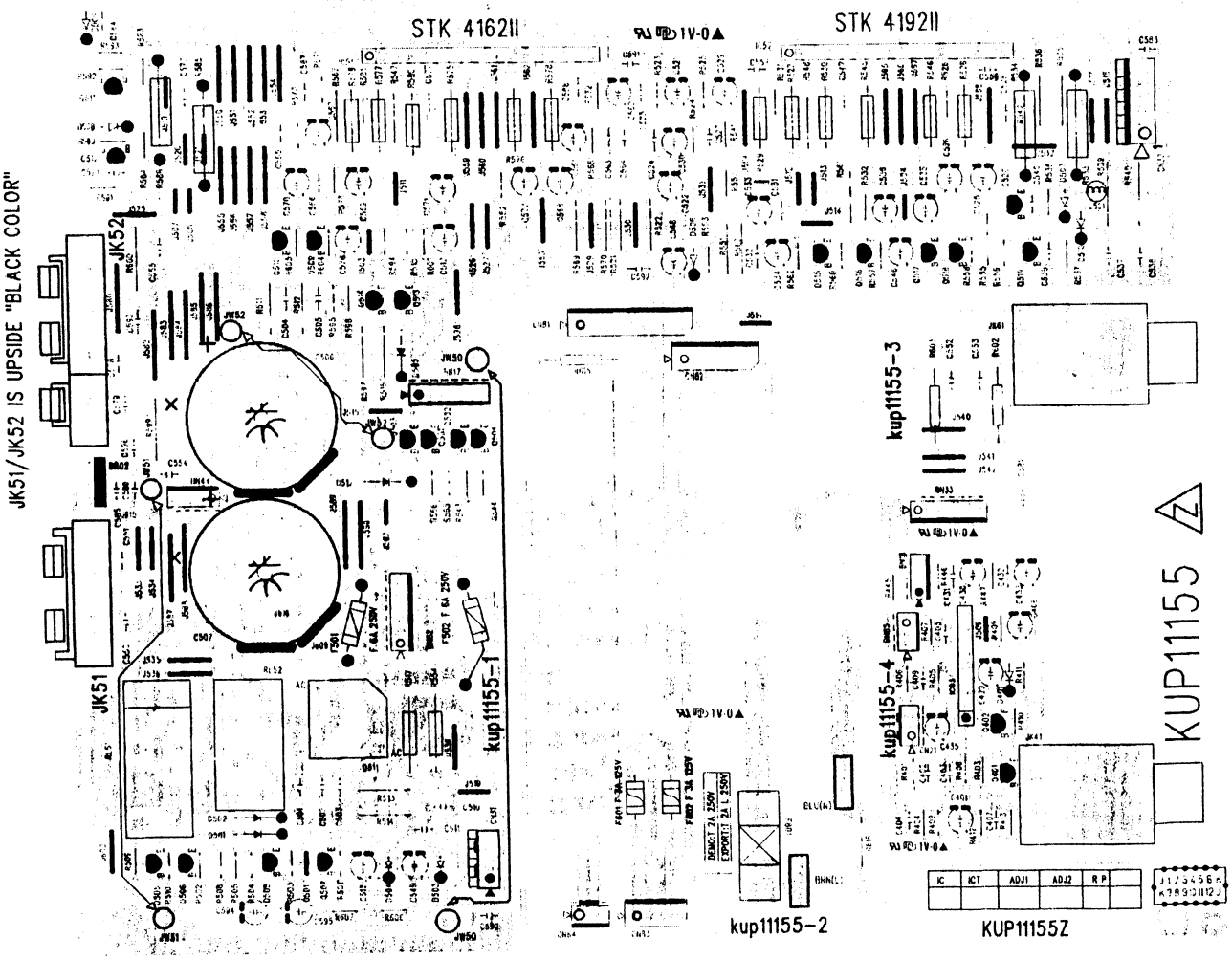

KUP11149


KUP11203

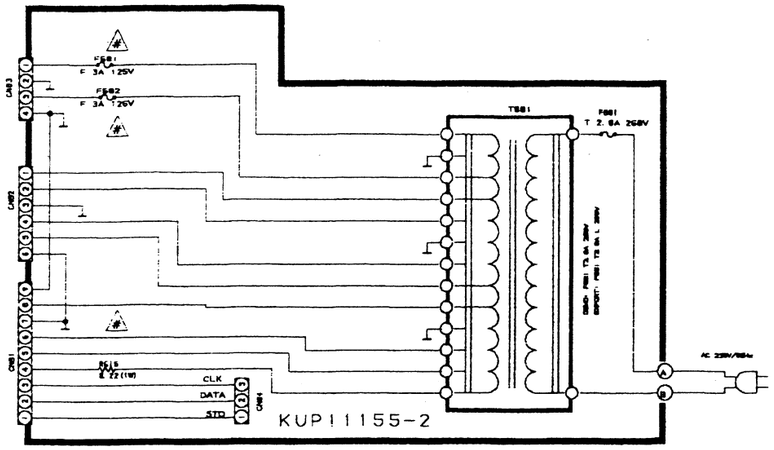

KUP11148

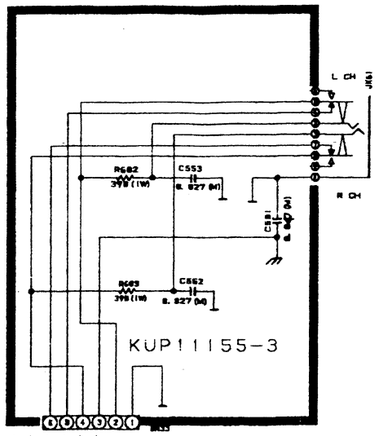


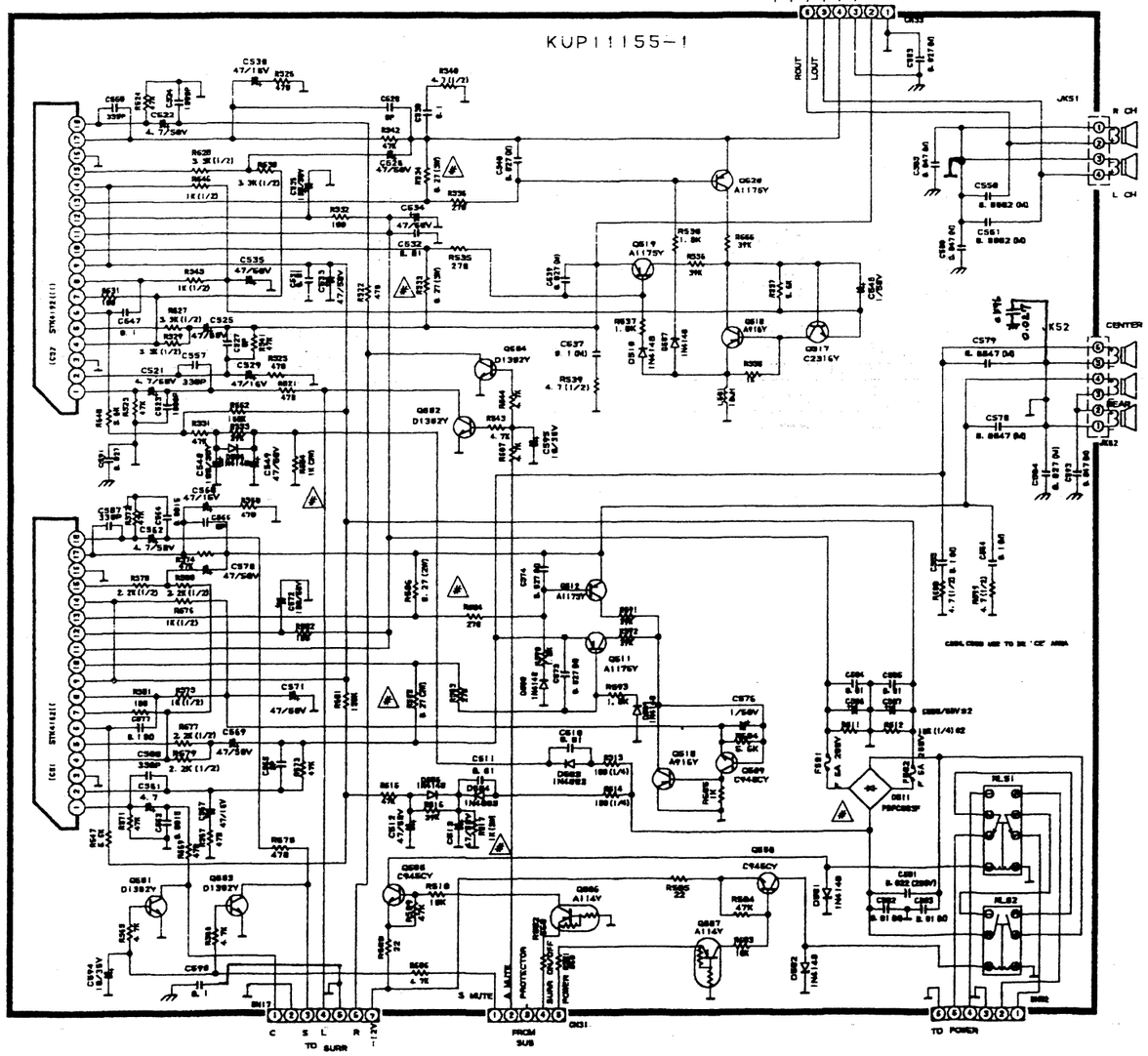

KUP11154
DIP
KUP11154 Z
7806
A614Y
D288Y
DIP

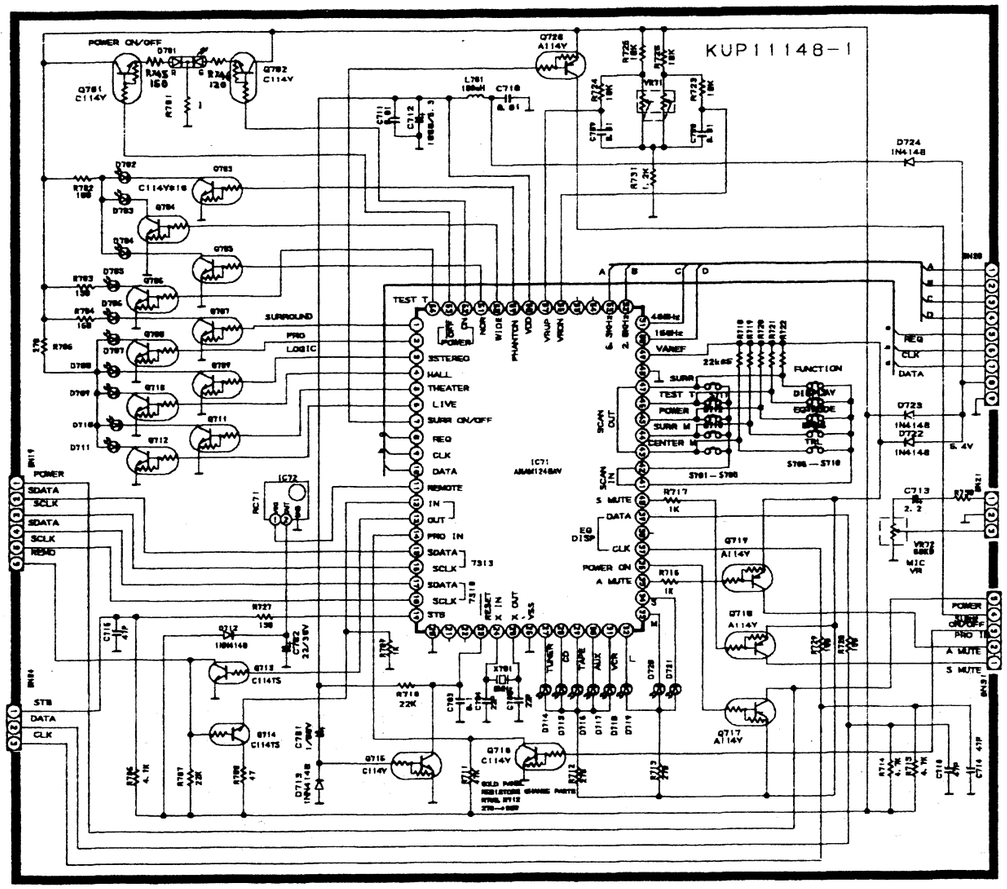

STK 4162II
STK 4192II
JK51/JK52 IS UPSIDE "BLACK COLOR"
JK52
JK51
kup11155-1
kup11155-3
kup11155-4
kup11155-2
KUP11155
KUP11155Z

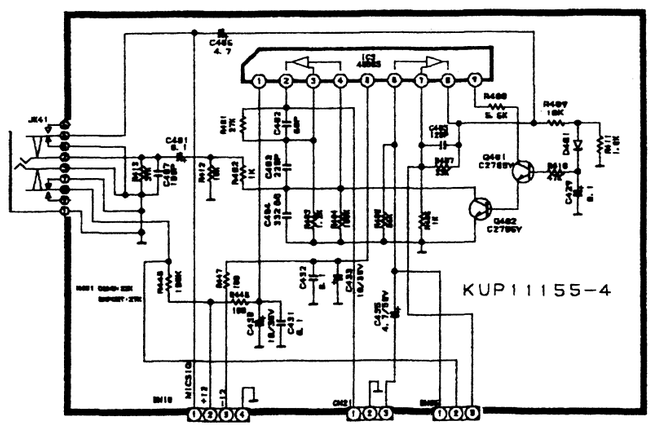
SCHEMATIC DIAGRAM Verstärker V4085

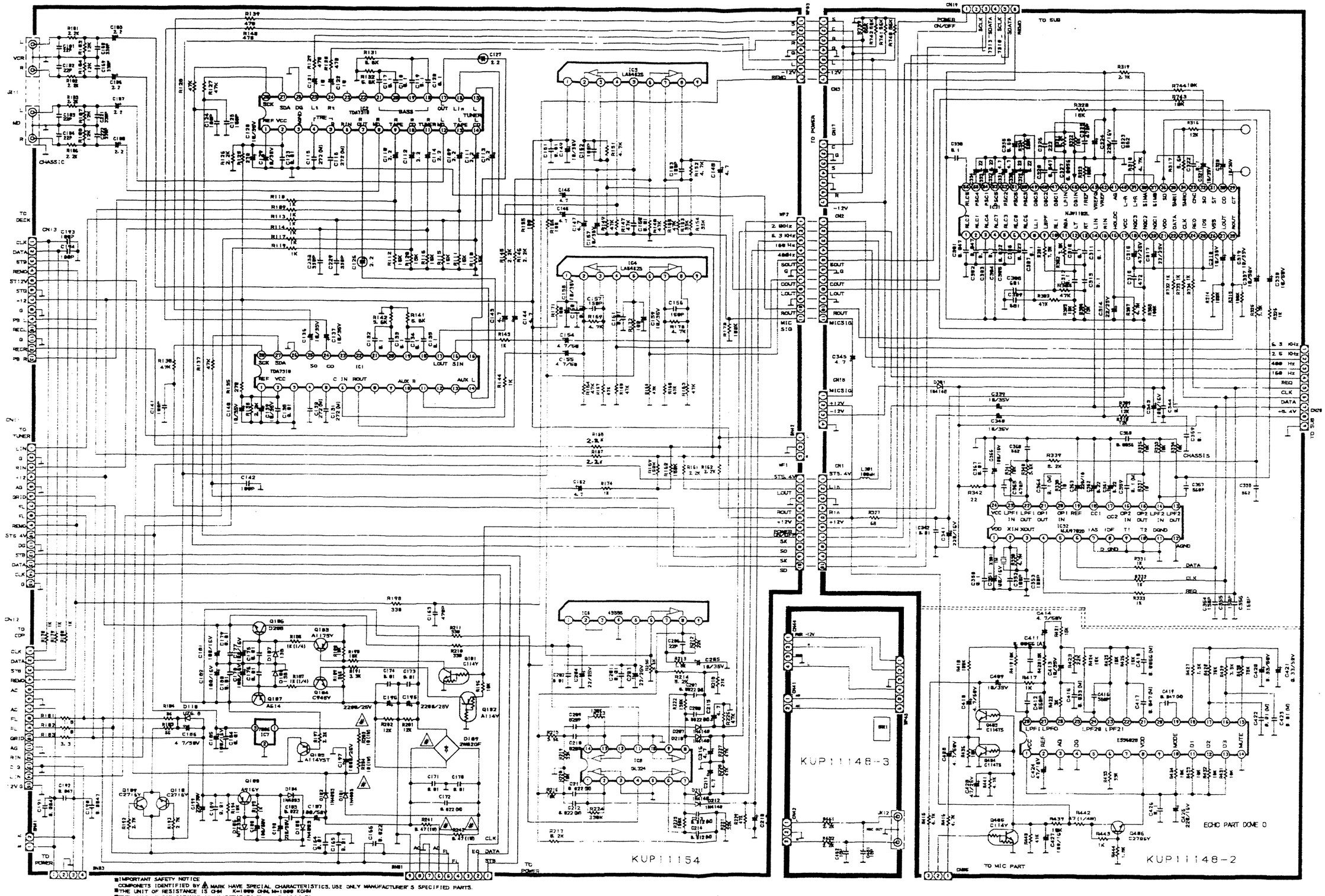




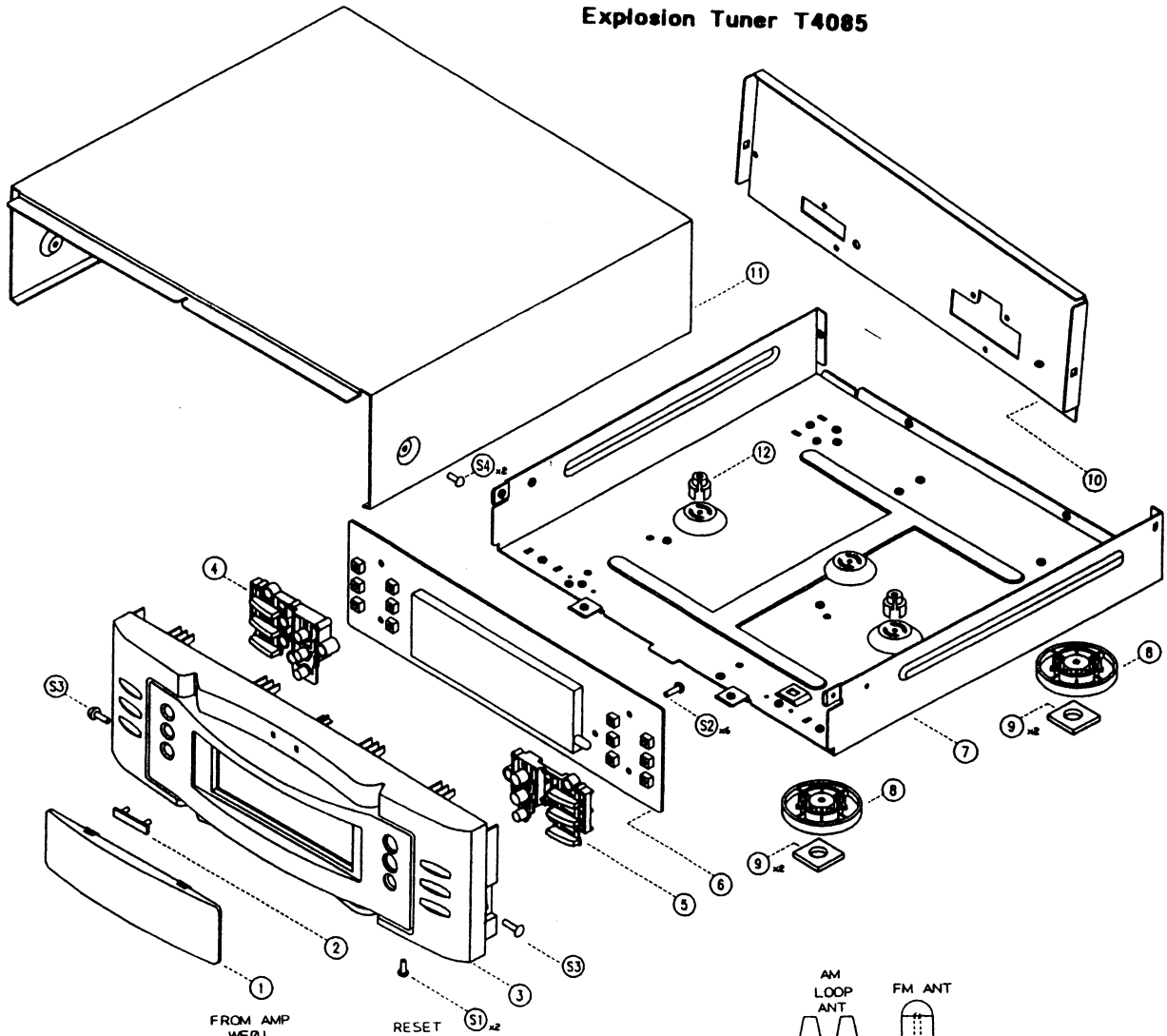




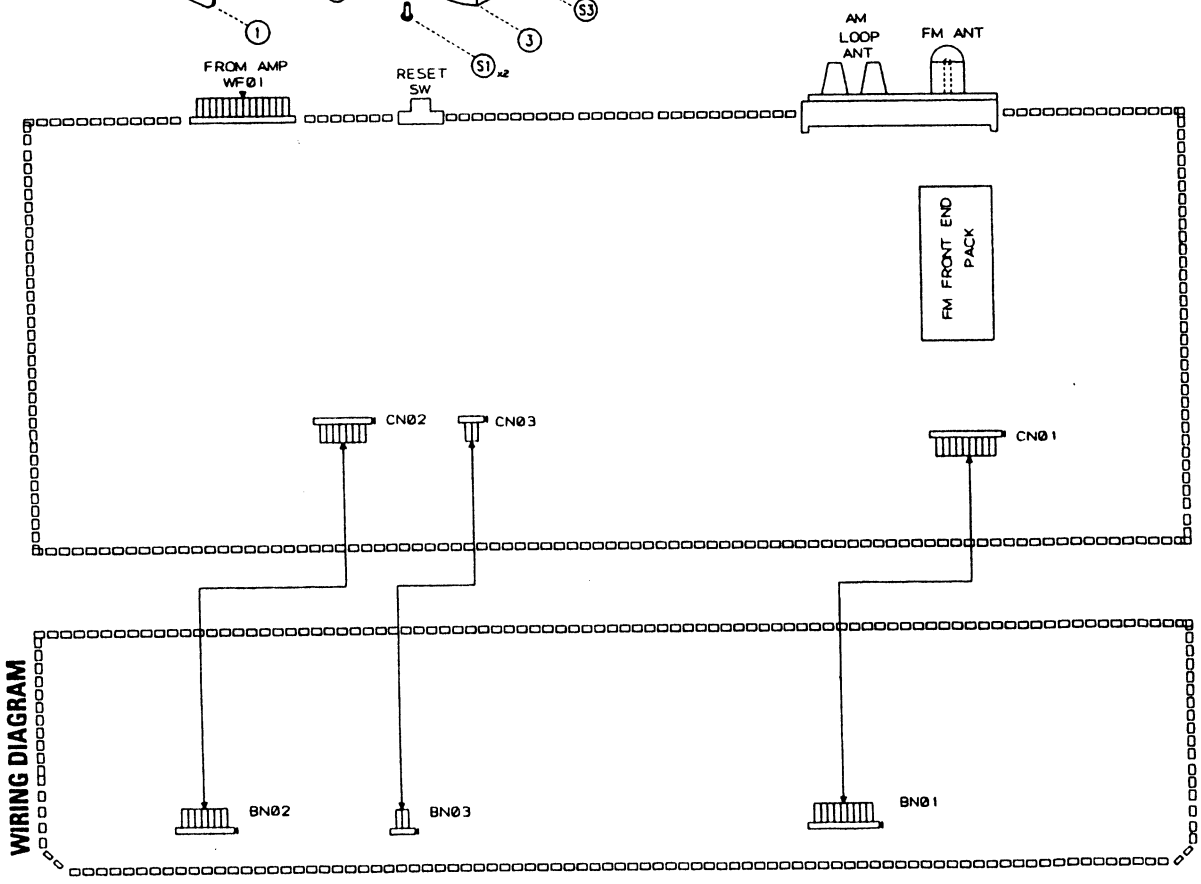



KUP11154
KUP11148-3
KUP11148-2
TO POWER
TO SUB
TO DECK
TO TUNER
TO CDP
TO MIC PART
CHASSIC
CHASSIS
ECHO PART DOME 0
IMPORTANT SAFETY NOTICE
COMPONETS IDENTIFIED BY ⚠ MARK HAVE SPECIAL CHARACTERISTICS. USE ONLY MANUFACTURER'S SPECIFIED PARTS.
THE UNIT OF RESISTANCE IS OHM
THE UNIT OF CAPACITANCE IS MICROFARAD(uF).
THIS SCHEMATIC DIAGRAM MAY BR MODIFIED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE.

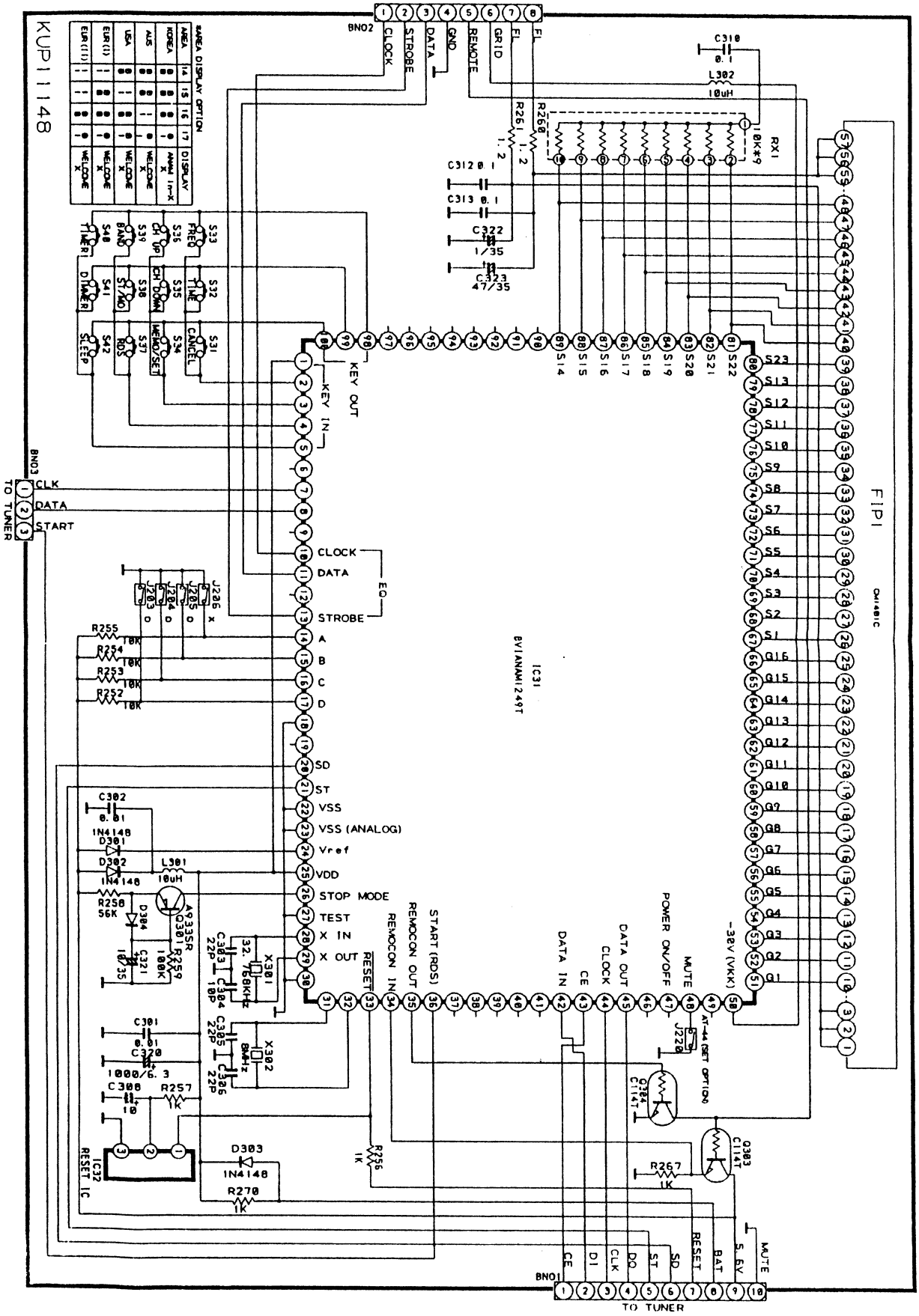
Explosion Tuner T4085



WIRING DIAGRAM



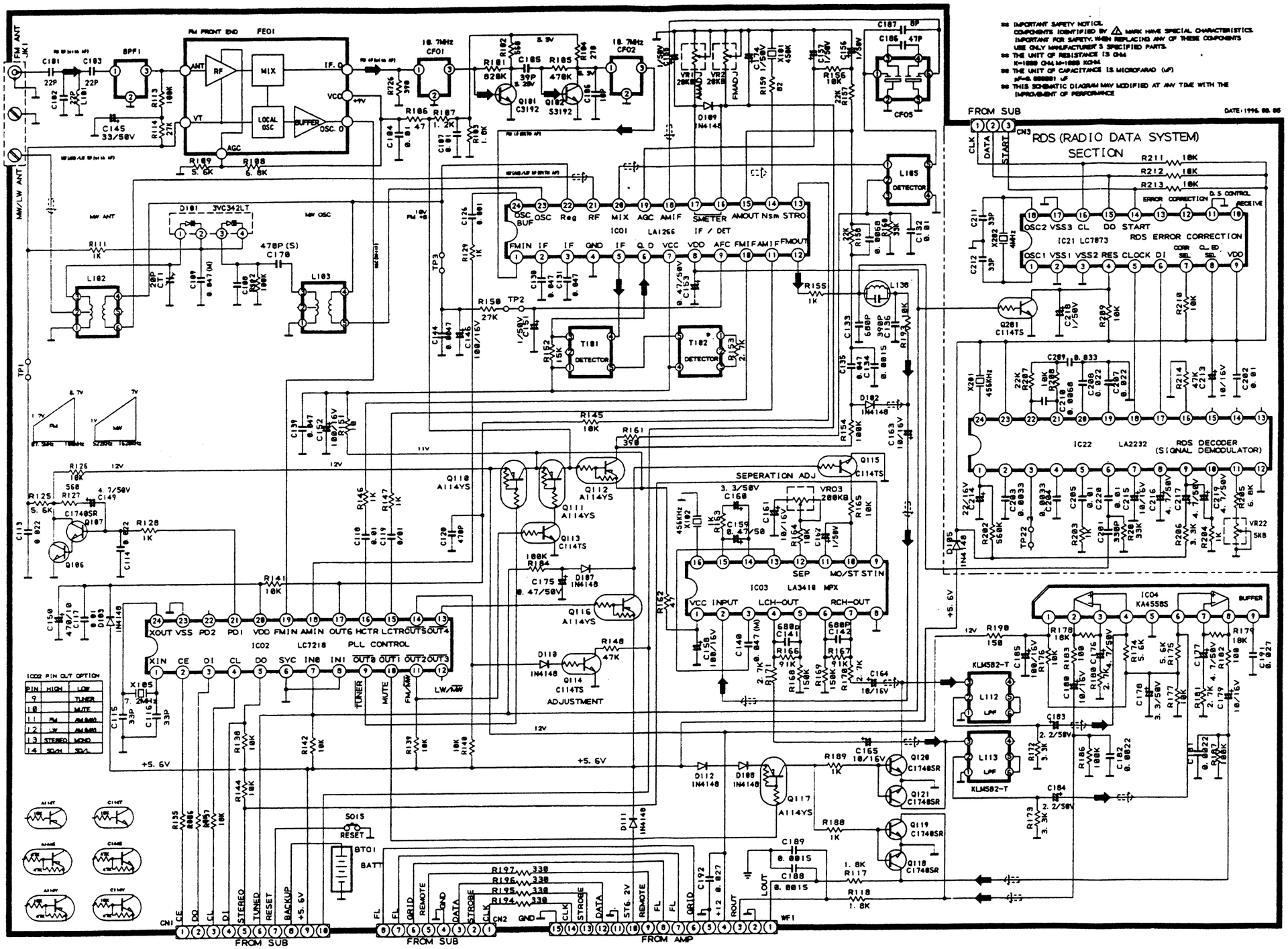
Bedienplatine Tuner T4085



SCHEMATIC DIAGRAM

Platine Tuner T4085

MAIN SCHEMATIC DIAGRAM



IC01 LA1266 (MONO) UNIT:V

NO	FM	MW	NO	FM	MW
1	2.5	1.8	13	0	0
2	2.5	1.1	14	1.5	1.5
3	2.5	1.1	15	1.5	3.8
4	0	1.1	16	1.3	8.6
5	12.8	12.1	17	0	1.2
6	12.8	12.1	18	2.5	1.1
7	12.8	12.1	19	1.5	1.4
8	0	0	20	0	12.5
9	3.7	3.7	21	4.8	3.7
10	2.5	2.5	22	4.8	3.7
11	2.5	2.5	23	4.8	3.7
12	3.1	3.1	24	3.1	3.3

IC02 LC7218 (MONO) UNIT:V

NO	VOLTAGE	NO	VOLTAGE
1	2.8	13	5.3 (8)
2	0	14	0
3	0	15	0
4	0	16	0
5	0	17	0
6	GND	18	0
7	0	19	2.3
8	GND	20	4.5
9	0	21	1.1
10	4.5	22	1.1
11	4.5	23	GND
12	2.2 (LW)	24	7.2MHz

IC03 LA3418 (MONO) UNIT:V

NO	VOLTAGE	NO	VOLTAGE
1	10	9	0 (3.0)
2	3.8	10	3.8
3	3.8	11	3.8
4	4.9	12	3.8
5	3.8	13	3.8
6	3.8	14	3.8
7	4.9	15	3.8
8	GND	16	3.5

IC21 LC7873 (RDS ON) UNIT:V

NO	VOLTAGE	NO	VOLTAGE
1	2.8 (4MHz)	10	OPEN
2	GND	11	GND
3	GND	12	OPEN
4	4.8	13	OPEN
5	DATA	14	DATA
6	DATA	15	DATA
7	4.6	16	DATA
8	4.6	17	GND
9	4.6	18	2.8

IC22 LA2232 (RDS ON) UNIT:V

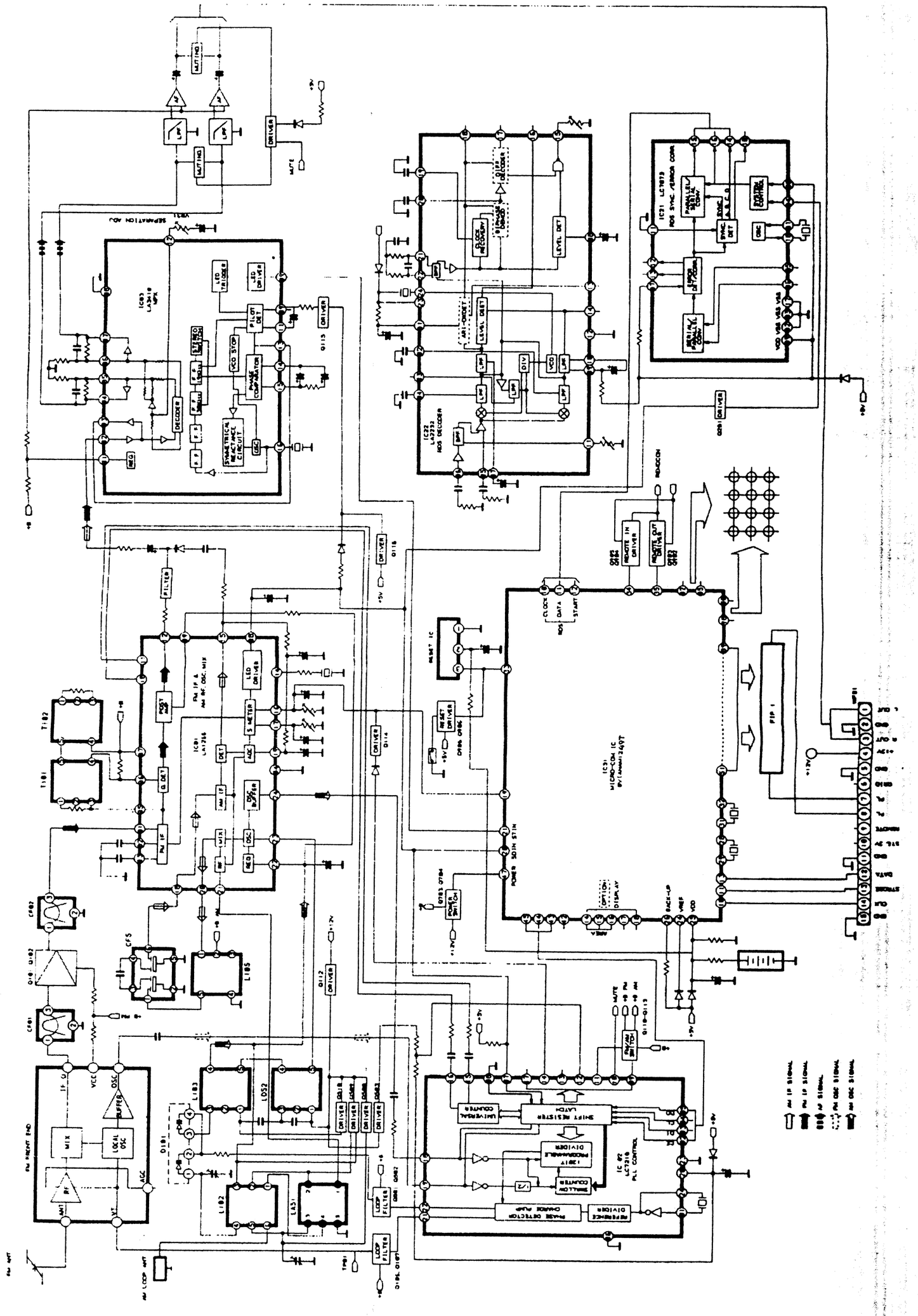
NO	VOLTAGE	NO	VOLTAGE
1	1.5	13	OPEN
2	1.5	14	OPEN
3	0.5	15	OPEN
4	1.5	16	0.5
5	2.5	17	DATA
6	2.5	18	DATA
7	2.8	19	X
8	1.2	20	1.8
9	1.5	21	2.8
10	0	22	2.8
11	0.5	23	4.8
12	GND	24	456KHz

IC04 MC4558S (BUFFER) UNIT:V

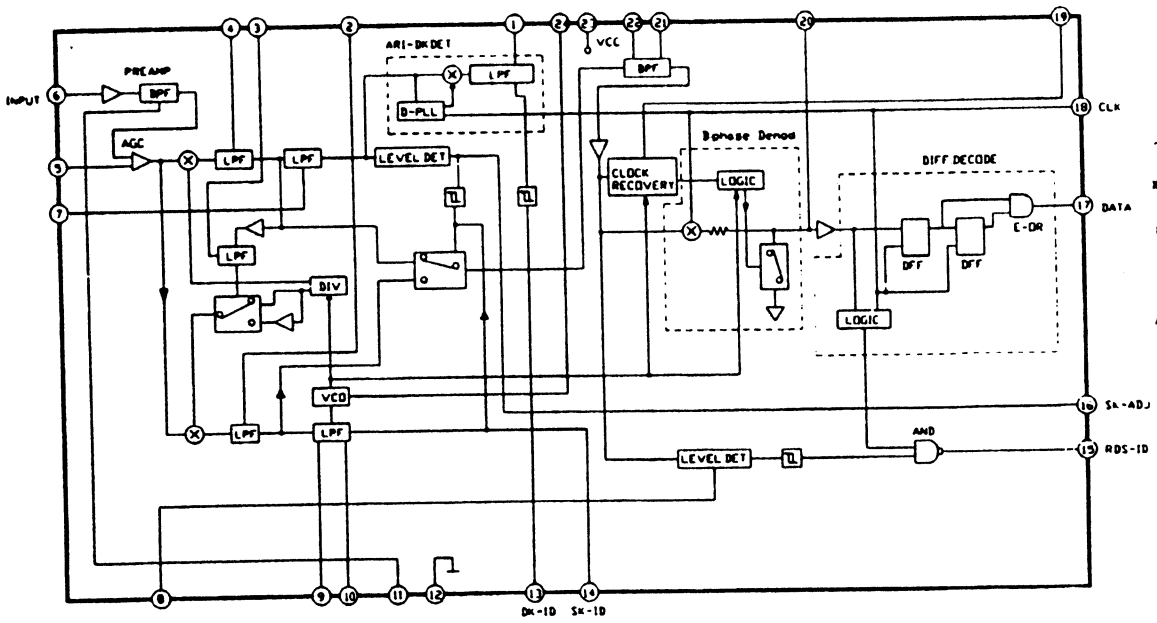
NO	VOLTAGE
1	12
2	6
3	6
4	6
5	GND
6	6
7	6
8	6
9	12

BLOCK DIAGRAM

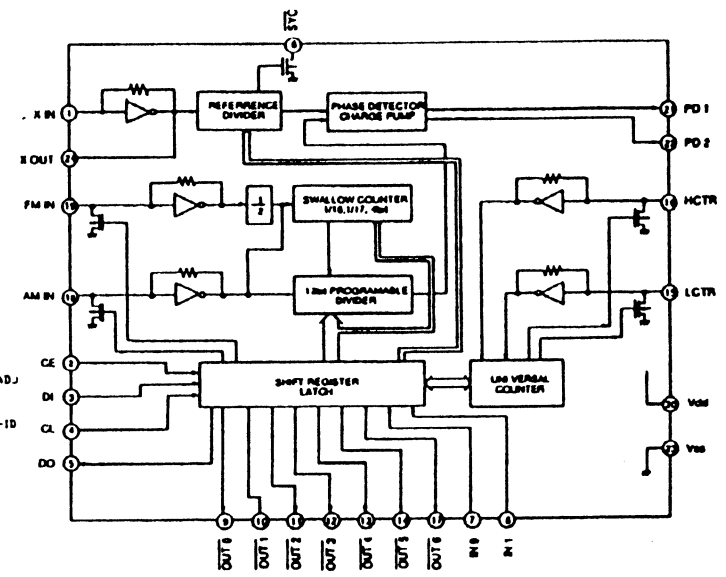
Tuner T4085



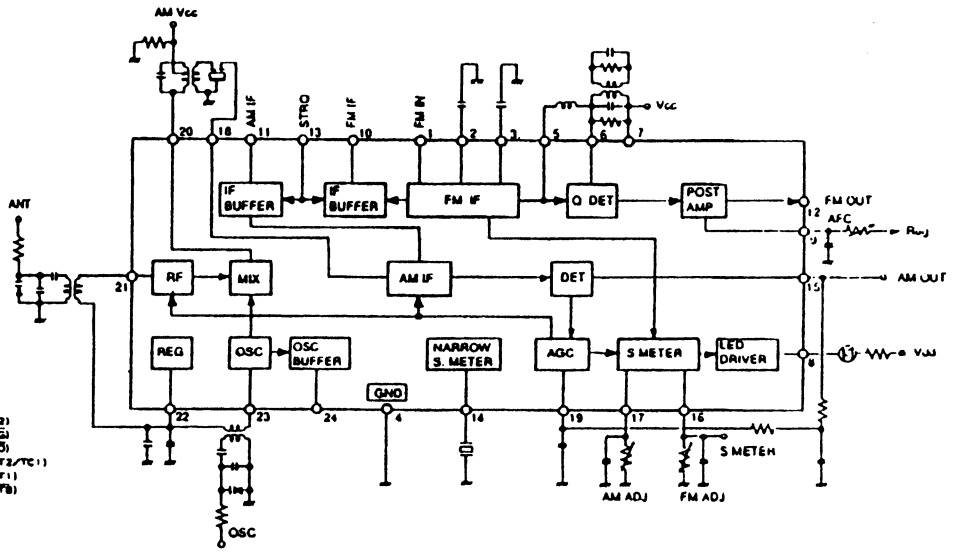
LA2232



• LC7218 (PLL SYNTHESIZER)

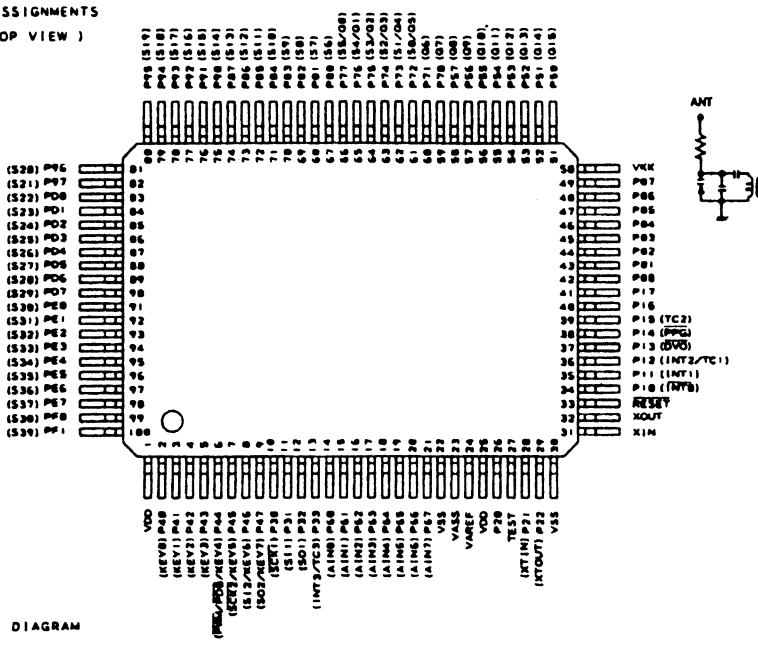


• LA1266 (AM/FM IF AMP)

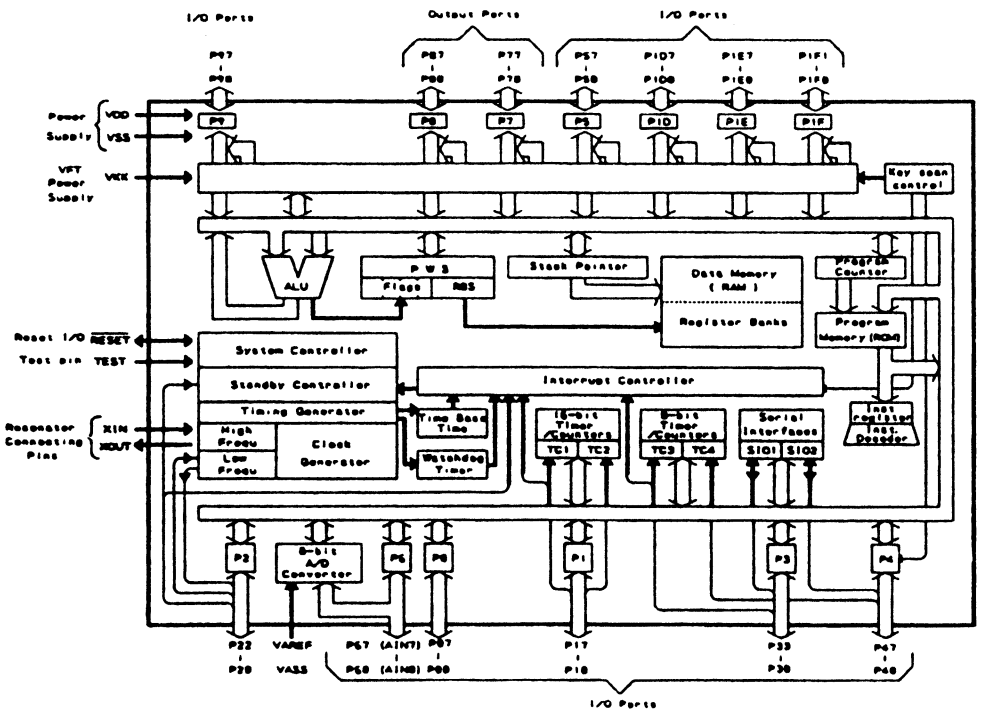


[U-COM FUNCTION BVIANAMI249T

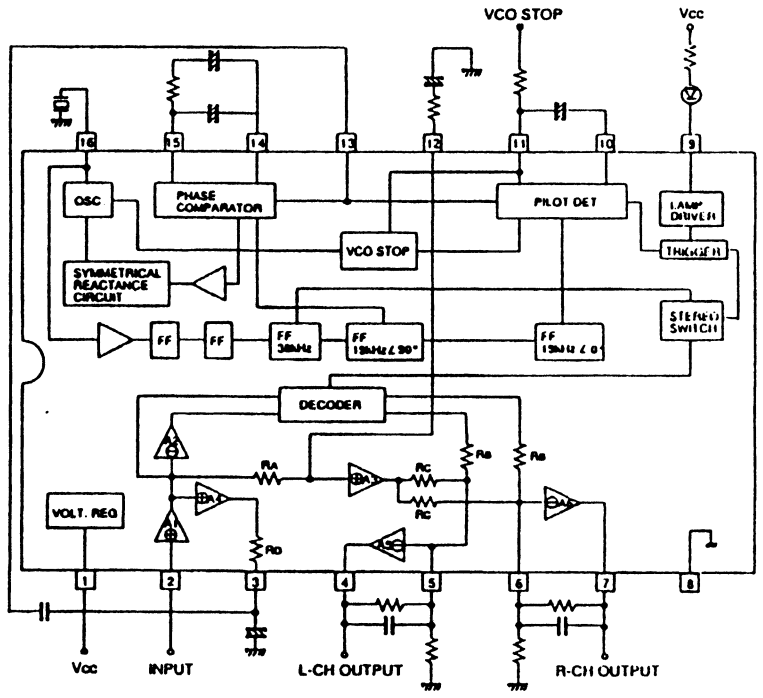
PIN ASSIGNMENTS
(TOP VIEW)



BLOCK DIAGRAM



• LA3410A (PLL FM MPX DEMODULATOR)



■ RESISTORS AND CAPACITORS

Notes : • Part numbers are indicated for most mechanical parts.
Please use this part number for parts order.
• IMPORTANT SAFETY NOTICE.
Components identified by ! mark have special characteristics important for safety
When replacing any of these components, use only manufacture's specified parts.
• The unit of resistance is OHM(Ω)
K=1000(Ω), M=1000(KΩ)
• The unit of capacitance is MICROFARED(μF)
P=10 ⁻⁶μF

■ Numbering System of Resistor

Example

KRD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value

Resistor Type	Wattage	Tolerance
KRD: Carbon	20:1/5W	F:± ±1%
KRG: Metal Oxide	25:1/4W	J:± ±5%
	50:1/2W	K:± ±10%
	1:1W	
KRF:Metal Cement	2:2W	
	3:3W	

■ Numbering System of Capacitor

Example

KCKR	1H	101	K	B
Type	Voltage	Value	Tolerance	Peculiarity

Capacitor Type	Voltage		Tolerance
	ECEA Type	Other	
KCB:Ceramic	0J:6.3V	1H:50V DC	C: ±0.25pF
KCC:Ceramic	1A:10V	1:125V DC	G: ±2%
KCK:Ceramic	1C:16V	KC:400V AC	J: ±5%
KCQ:Polyester	1E:25V		K: ±10%
KCQP:Polypropylene	1H:50V		Z: +80%, -20%
KCQS:Polystyrol	1V:35V		

ATTENTION

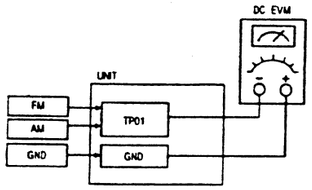
1. When placing an order for parts, be sure to list the Part No., Model No. and the description of each part Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
2. Please make sure that Part No. is correct when ordering.
If not, a part different from the one you ordered may be delivered.
3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

1 This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List Service Parts" from which these parts should be selected and stocked.
2 Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied
3. How to rear the Parts List.

1. TUNING FREQUENCY RANGE ADJUSTMENTS

(FM) DC VOLTMETER ..... CONNECT TO TEST POINT TP1 and GND
(AM) DC VOLTMETER ..... CONNECT TO TEST POINT TP1 and GND

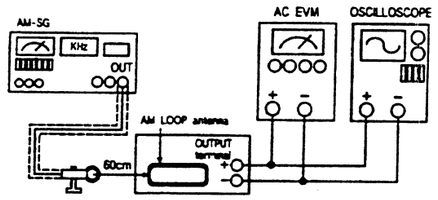


NO.	Band	Frequency	Adjust for	Adjustment
1	FM	87.50MHz	1.5V	L4
2	AM	522KHz	1V	L103

2. AM TRACKING ADJUSTMENT

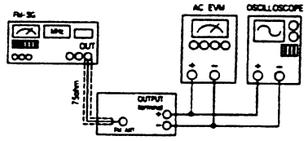
Signal Generator ..... Connects to the AM ANT. Coil through the loop antenna.
Adjust for the indication of VTVM of the wave form of scope to be maximum.

BAND	Step	Frequency	Adjust for	Adjustment
AM	1	612KHz	Maximum sensitivity	L102
	2	1503KHz	Maximum sensitivity	CT01
	3	Repeat steps 1 and 2 several times.		



3. FM-RF ADJUSTMENT

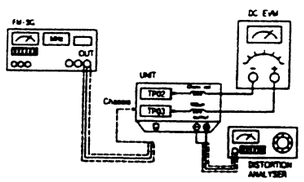
Signal Generator ..... Connect to FM ANT JACK (FM IN) through the dummy.



NO.	Frequency	Adjust for	Adjustment
1	90.10MHz	Maximum Sensitivity	L1, L2, L3
2	Repeat step 1 several times.		

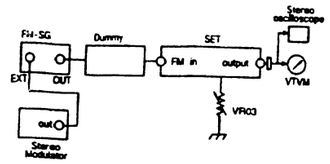
4. FM MONO DISTORTION ADJUSTMENT

DC VOLTMETER .....Connect to TP02(-), TP03(+)
Signal Generator .....Connect to FM ANT Jack (FM IN) through the dummy.
Distortion Meter .....Connect to the output.



NO.	Frequency	Adjust for	Adjustment
1	100.10MHz	DC Voltmeter 0V	T101
2	100.10MHz	Minimum T.H.D	T102
3	Repeat steps 1 and 2 several times.		

5. FM STEREO SEPARATION



Pilot signal	Adjust for	Adjustment
ON	Different of R and L must be maximum	VR03

NOTE : In case of adjusting the stereo separation, of input is L (or R) channel, R (or L) channel must be maximum.

■ ALIGNMENT INSTRUCTIONS

EQUIPMENT NEEDED:

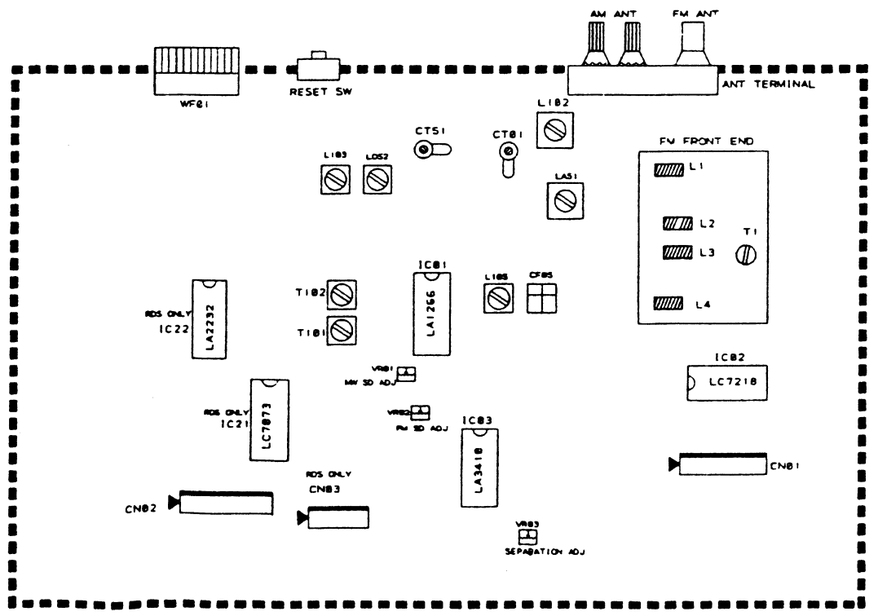
AM Signal Generator
FM Signal Generator
Oscilloscope
VTVM(AC, DC)
Test loop antenna (MW Adjustment)
Dummy antenna (FM Adjustment)
Stereo signal modulator
Distortion analyser

IMPORTANT

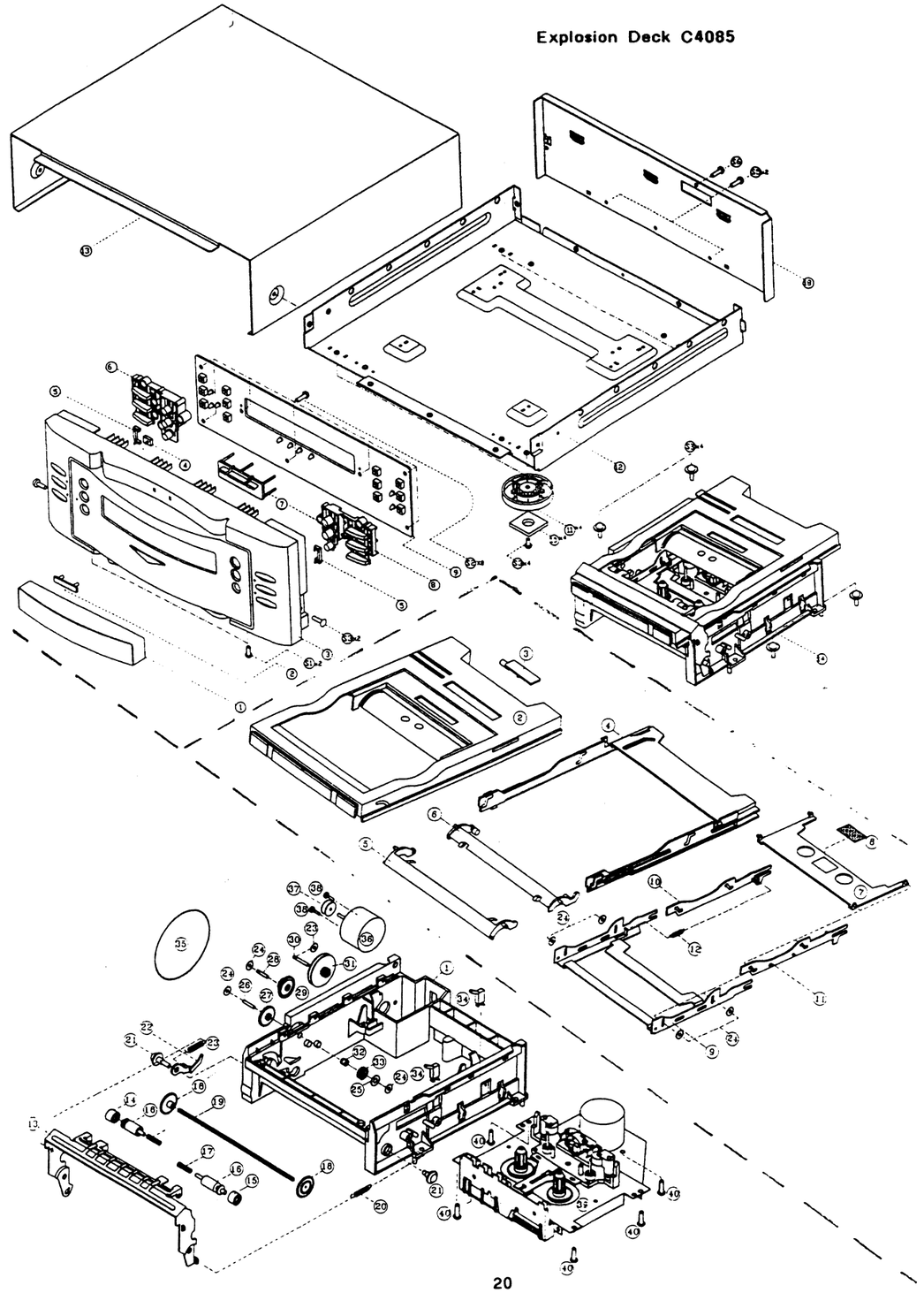
1. Check power-source voltage.
2. Set the function switch to band aligned.
3. Keep the signal input as low as possible to adjust accurately.
4. Modulation and modulation frequency.

Band \ Item	Modulation	Modulation frequency
AM	30%	400Hz
FM	100%(75KHz Dev.)	400Hz

■ ADJUSTMENT POINT

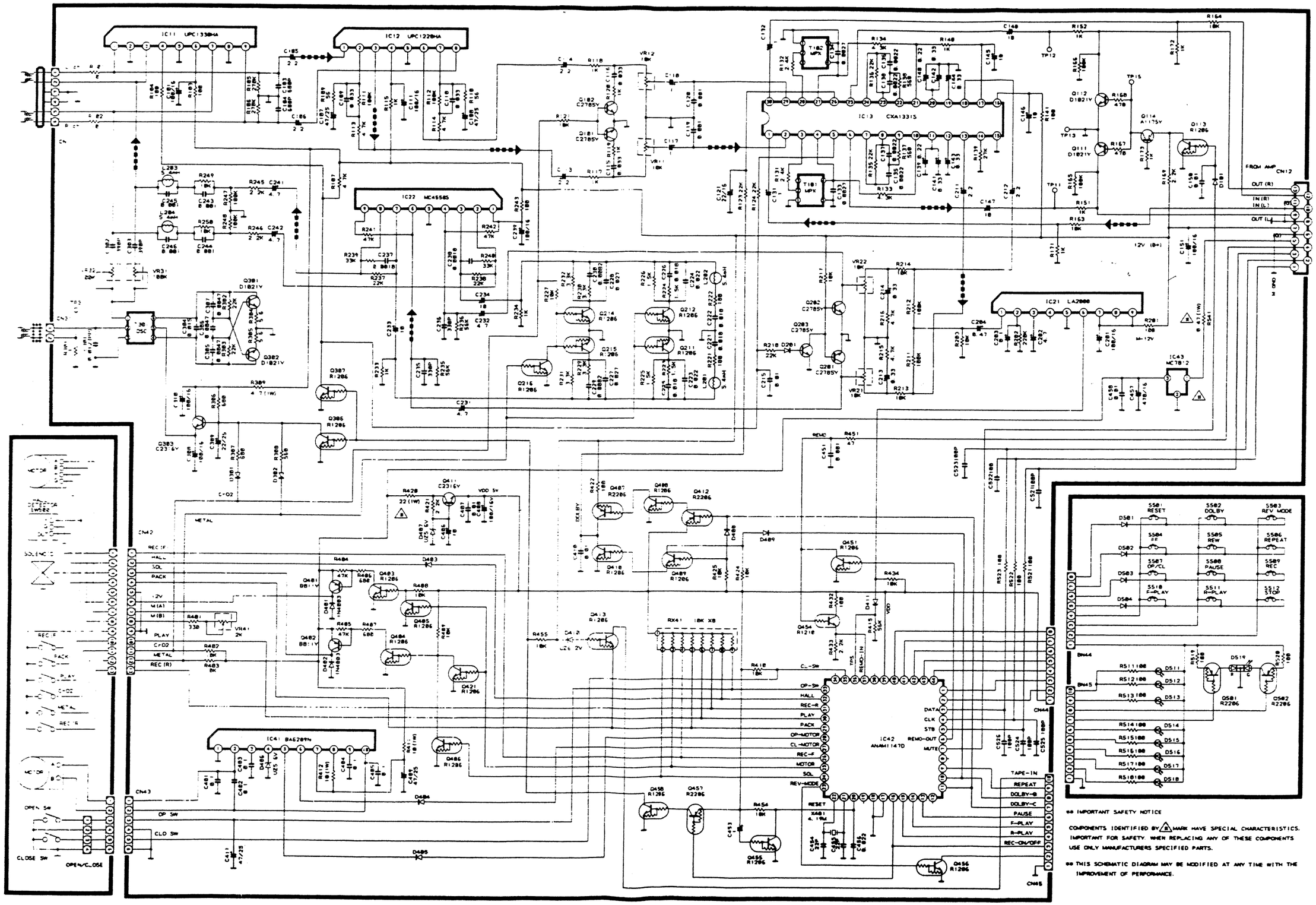


Explosion Deck C4085



SCHEMATIC DIAGRAM

Cassettendeck C4085



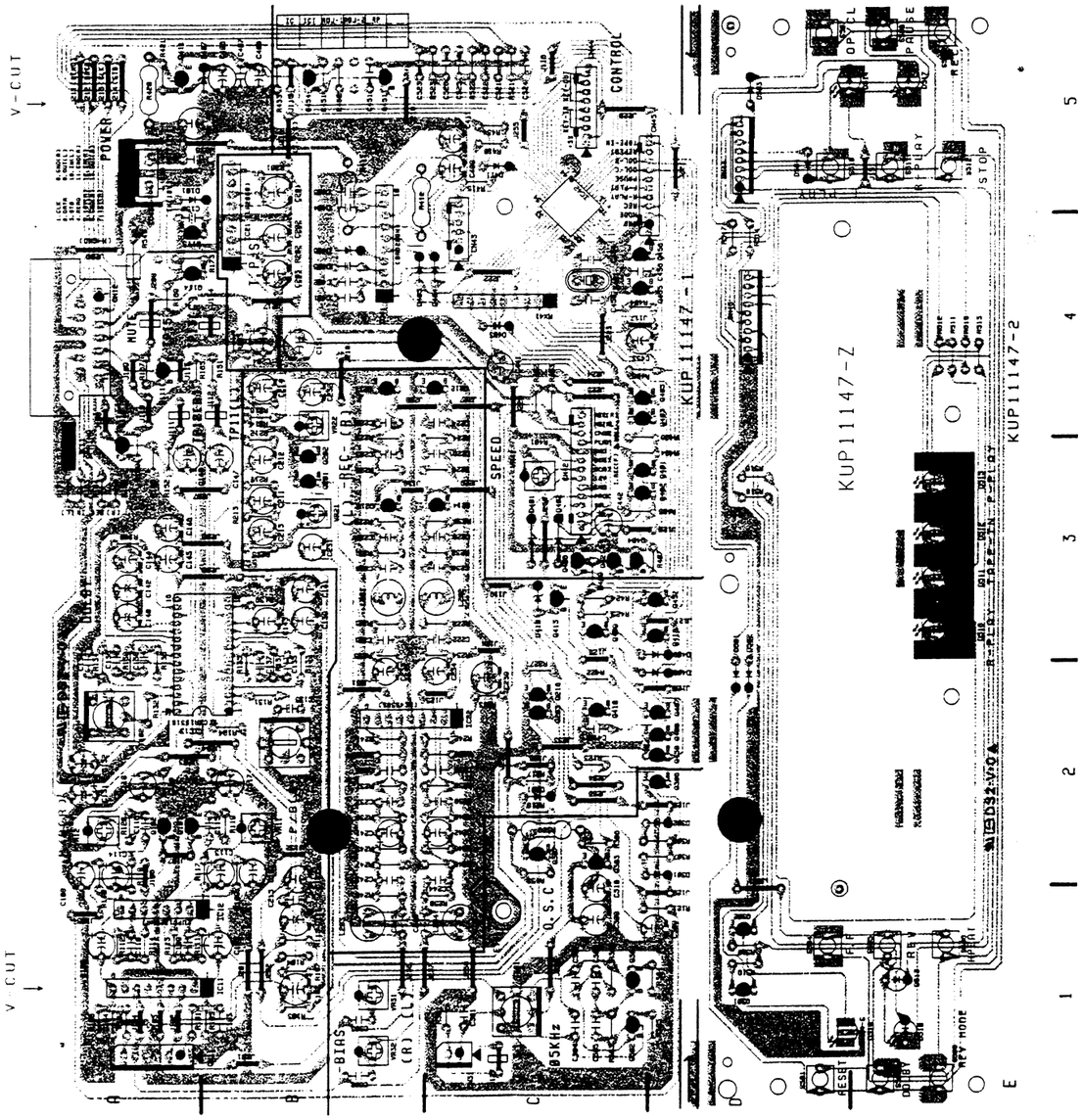
** IMPORTANT SAFETY NOTICE

COMPONENTS IDENTIFIED BY ⚠ MARK HAVE SPECIAL CHARACTERISTICS. IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS USE ONLY MANUFACTURERS SPECIFIED PARTS.

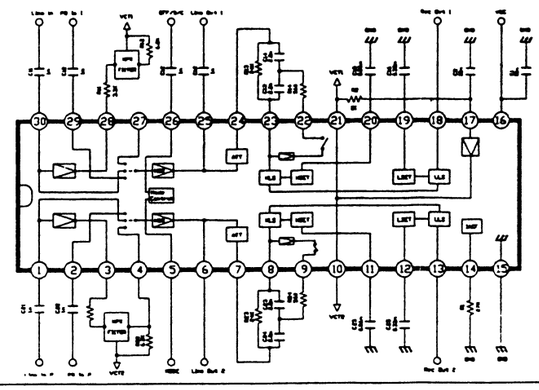
** THIS SCHEMATIC DIAGRAM MAY BE MODIFIED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE.

-08690 / DRUCK 5

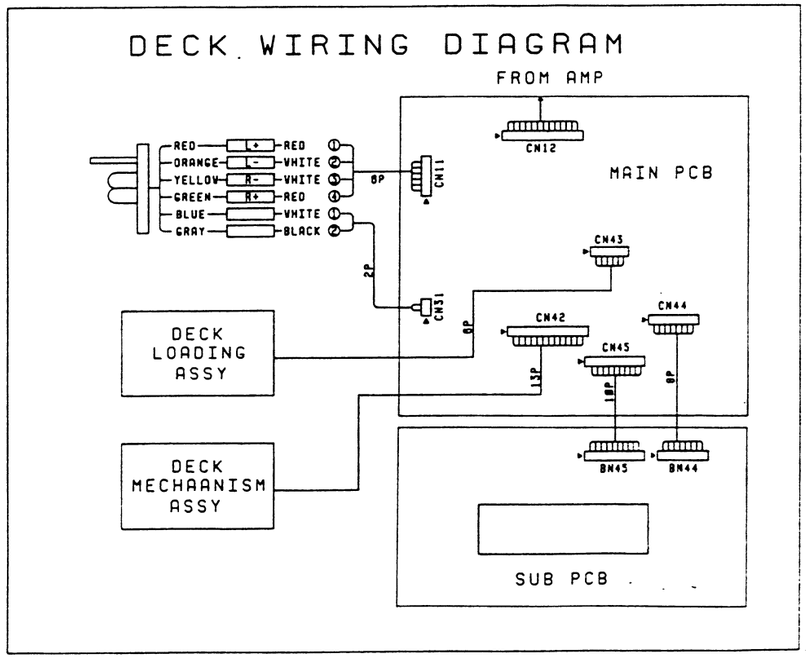
PRINTED CIRCUIT BOARDS



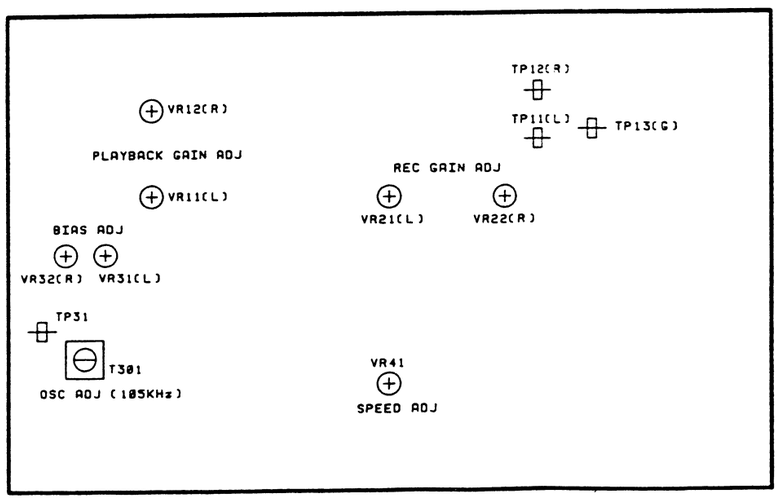
CXA1331S (DOLBY B. C Noise Reduction System)



DECK WIRING DIAGRAM



DECK ADJUSTMENT POINT



MEASUREMENT AND ADJUSTMENT METHODS

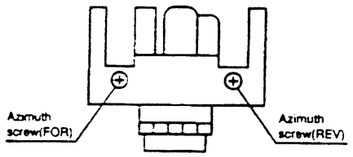
Measurement condition
- Dolby NR position: OFF
- Make sure heads are clean
- Make sure capstan and pressure roller are clean.

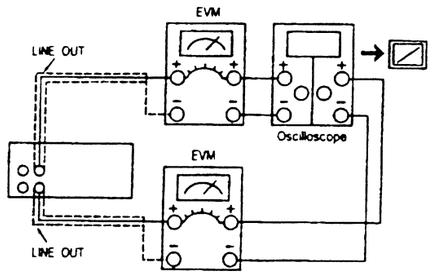
MEASURING INSTRUMENTS
- EVM(Electronic Voltmeter)
- Oscilloscope
- Frequency counter
- AF Oscillator
- DC Voltmeter
- ATT(Attenuator)
- Resistor (600Ω)

Test tape
- Head azimuth (10KHz, -10dB): MTT-114N
- Tape speed(3KHz, -10dB): MTT-111N
- Playback frequency response (125Hz, 1KHz, 10KHz, -10dB)
- Playback gain: MTT-150
- Blank tape
  Normal blank tape: STT-5513
  CrO_2 blank tape: STT-5563
  Metal blank tape: STT-5573

HEAD AZIMUTH ADJUSTMENT

1. Test equipment connections are shown in fig. 1.
2. Playback the head Azimuth test tape and requlate the angle adjust screw so that the outputs of L-ch and R-ch are maximized. (When the adjusting positions are different with L-ch and R-ch, find a position where the outputs of L-ch and R-ch are balanced and then make the adjustment.)
3. At the same time, obtain a lissajous waveform and eliminate phase deflection.
4. After the adjustment, apply screw lock to the angle adjusting value.



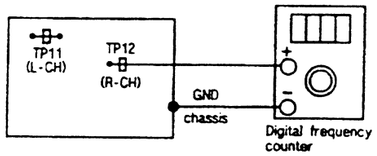


(FIG. 1)

TAPE SPEED ADJUSTMENT

1. Test equipment connections are shown in fig. 2.
2. Playback the middle part of the test tape.

Adjustment point	VR41
Standard Value	3,000Hz ±30Hz

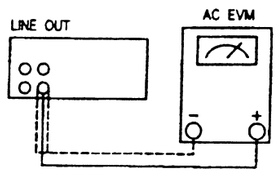


(FIG. 2)

PLAYBACK GAIN ADJUSTMENT

1. Test equipment connections are shown in fig. 3.
2. Playback the playback gain test tape. (MTT-150).
3. Adjust playback gain.

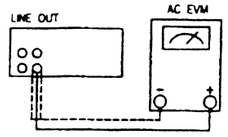
Adjustment Point	L ch : VR11	R ch : VR12
Standard Value	548mV	



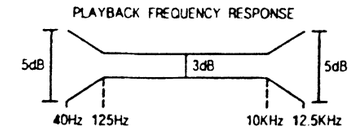
(FIG. 3)

PLAYBACK FREQUENCY RESPONSE

1. Testequipment connections are shown in fig. 4.
2. Playback the playback frequency response test tape.
3. Check that the frequency response is within the range shown in Fig. 5 for both L-ch and R-ch.



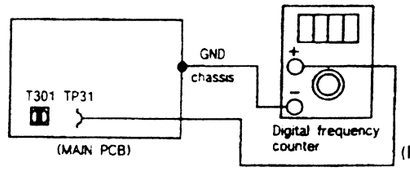
(FIG. 4)



(FIG. 5)

BIAS FREQUENCY ADJUSTMENT

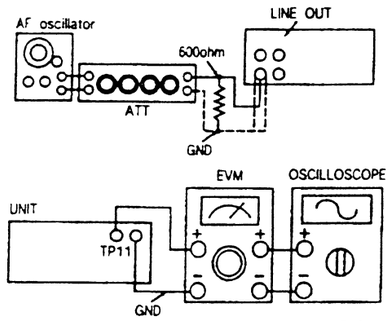
1. Test equipment connections are shown in fig. 6.
2. Load a CrO_2 blank test tape.
3. Press the record and pause button.
4. Adjust T301 for 105KHz frequency counter reading.



(FIG. 6)

OVERALL GAIN ADJUSTMENT

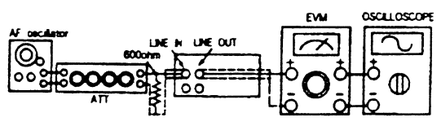
1. Test equipment connections are shown in fig. 7.
2. Insert the normal reference blank tape.
3. Place UNIT into recorde mode.
4. Supply a 1KHz signal through ATT (-10dB) from AF oscillator to line in.
5. Adjust ATT until monitor level at TP11 (L-ch) or TP12 (R-ch) becomes 180mV.
6. Playback recorded tape and make sure that the output level at TP11 (L-ch) or TP12 (R-ch) becomes 180mV.
7. If measured value is not 180mV, adjust it by using VR21 (L-CH) or VR22 (R-CH).
8. Repeat from step (2).

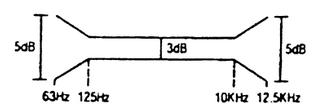


(FIG. 7)

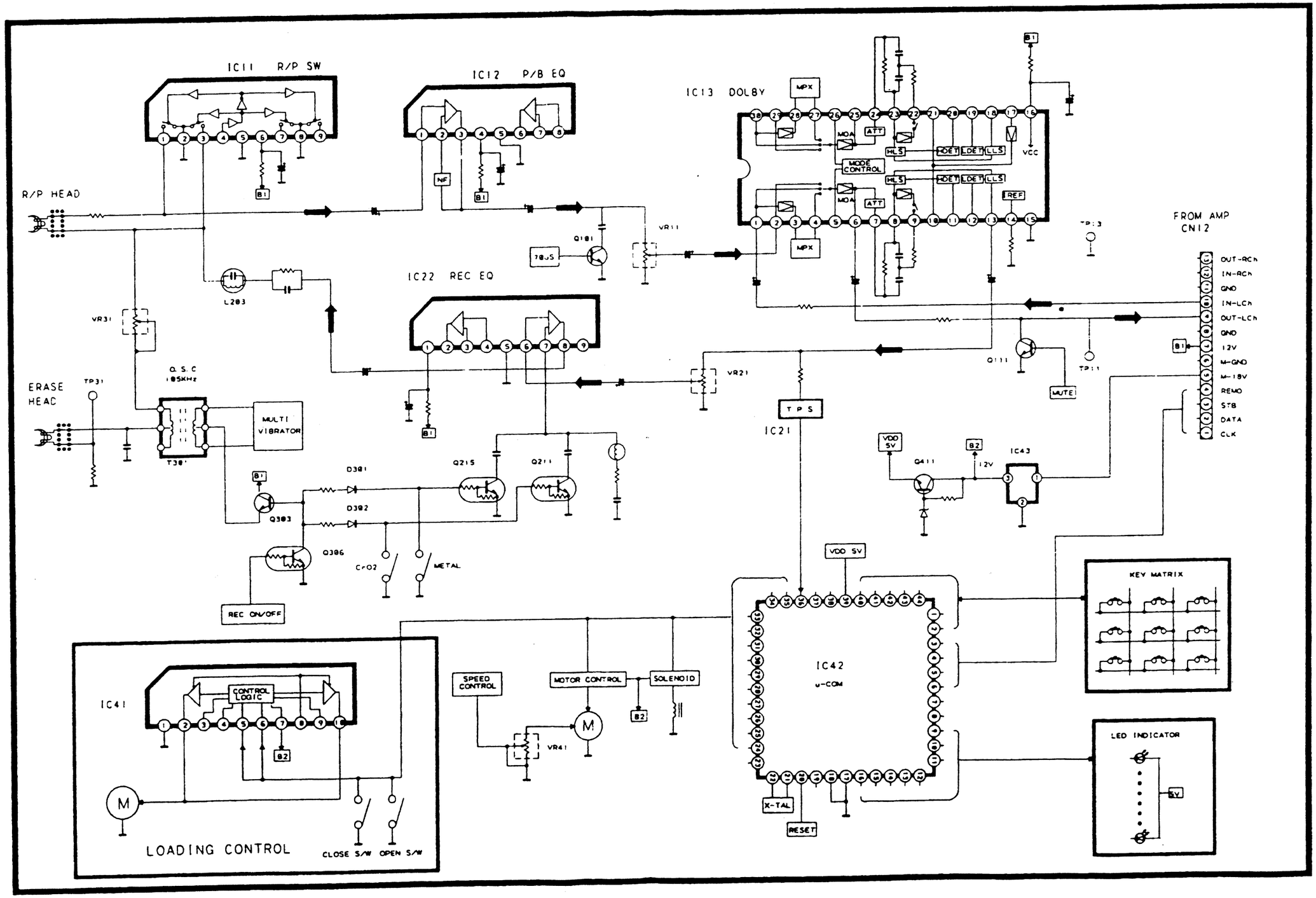
OVERALL FREQUENCY RESPONSE

1. Set a normal blank tape (STT-5513) and record by apply signal (100Hz, 1KHz, 10KHz) through ATT-from AF oscillator to line in (Line out Level: 33mV).
2. Playback the signal recorded in step 1, and check that the level of each output frequency in within the range shown in fig. 8 in comparison with the reference frequency (1KHz).
3. If it is not within the standard range adjust the bias current by using VR31 (L-CH) or VR32 (R-CH) so that the frequency level is within the standard.
   - Level up in high frequency range...Increase the bias current.
   - Level down in high frequency range...Decrease the bias current.
4. After that. increase the signal recorded on CrO_2 blank tape (STT-5563) and metal blank tape (STT-5573) up to 14KHz and adjust in the same way as mentioned above and check that the frequency level is within the range shown in Fig. 8.

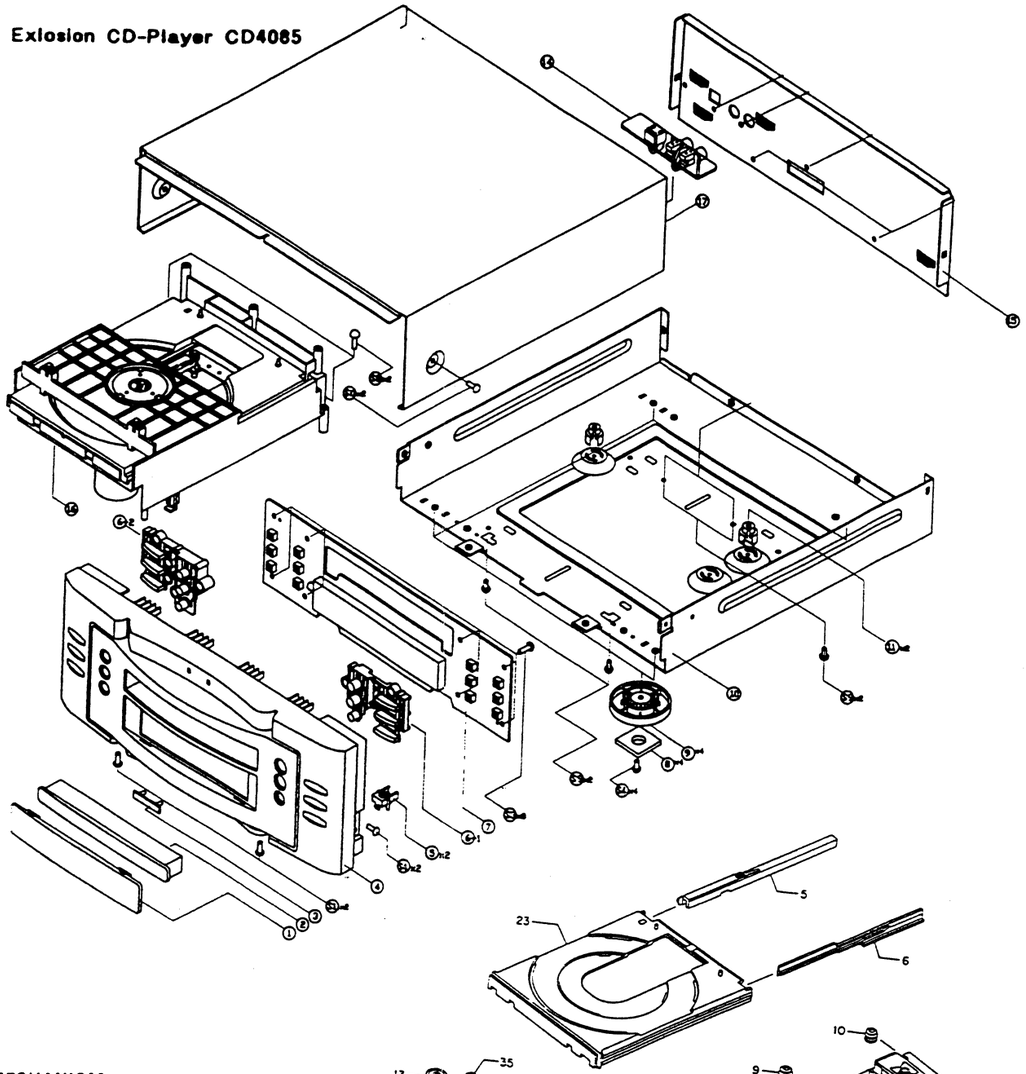




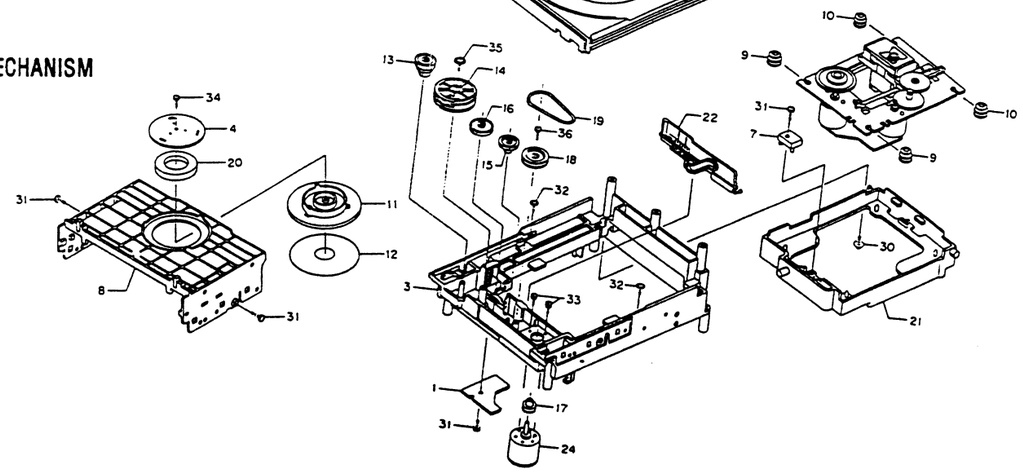
(FIG. 8)


IC11 R/P SW
IC12 P/B EQ
IC13 DOLBY
R/P HEAD
ERASE HEAD
IC22 REC EQ
VR31
VR11
VR21
L203
Q181
TP31
O.S.C 185KHz
MULTI VIBRATOR
T381
D381
D382
Q383
Q386
Q215
Q211
C-02
METAL
REC ON/OFF
MPX
ATT
MOA
MODE CONTROL
HLS
XDET
LDET
LLS
REF
VCC
TP13
FROM AMP CN12
OUT-RCh
IN-RCh
GND
IN-LCh
OUT-LCh
GND
12V
M-GND
M-18V
REMO
STB
DATA
CLK
Q111
TP11
MUTE
T P S
IC21
VDD 5V
Q411
12V
IC43
IC41
CONTROL LOGIC
LOADING CONTROL
CLOSE S/W
OPEN S/W
SPEED CONTROL
MOTOR CONTROL
SOLENOID
VR41
IC42
u-COM
X-TAL
RESET
KEY MATRIX
LED INDICATOR
5V

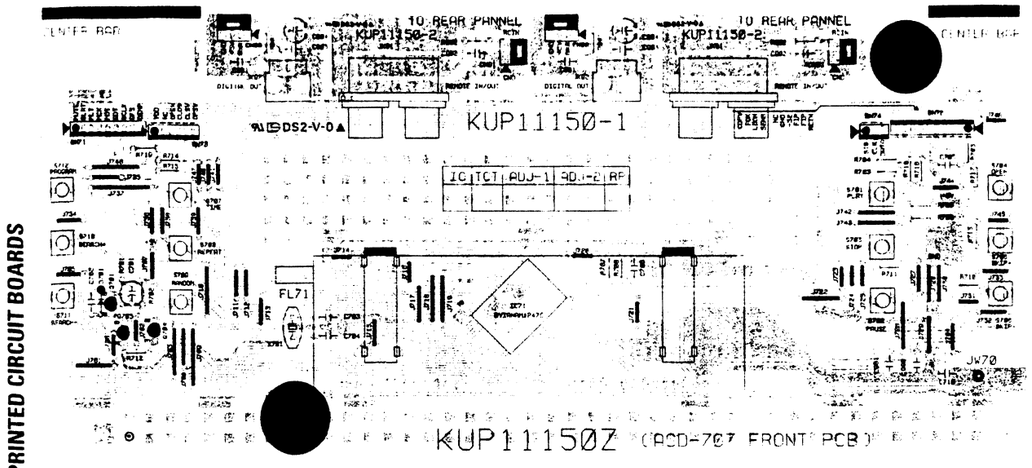
Exlosion CD-Player CD4085

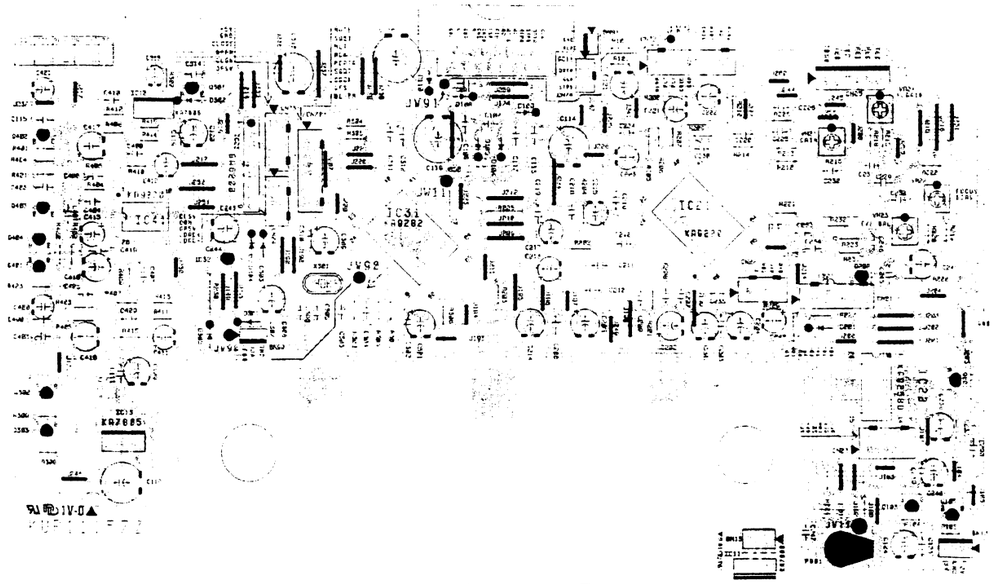


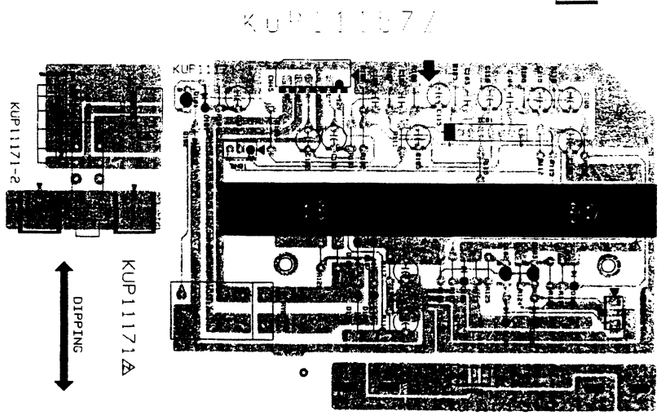
MECHANISM



PRINTED CIRCUIT BOARDS

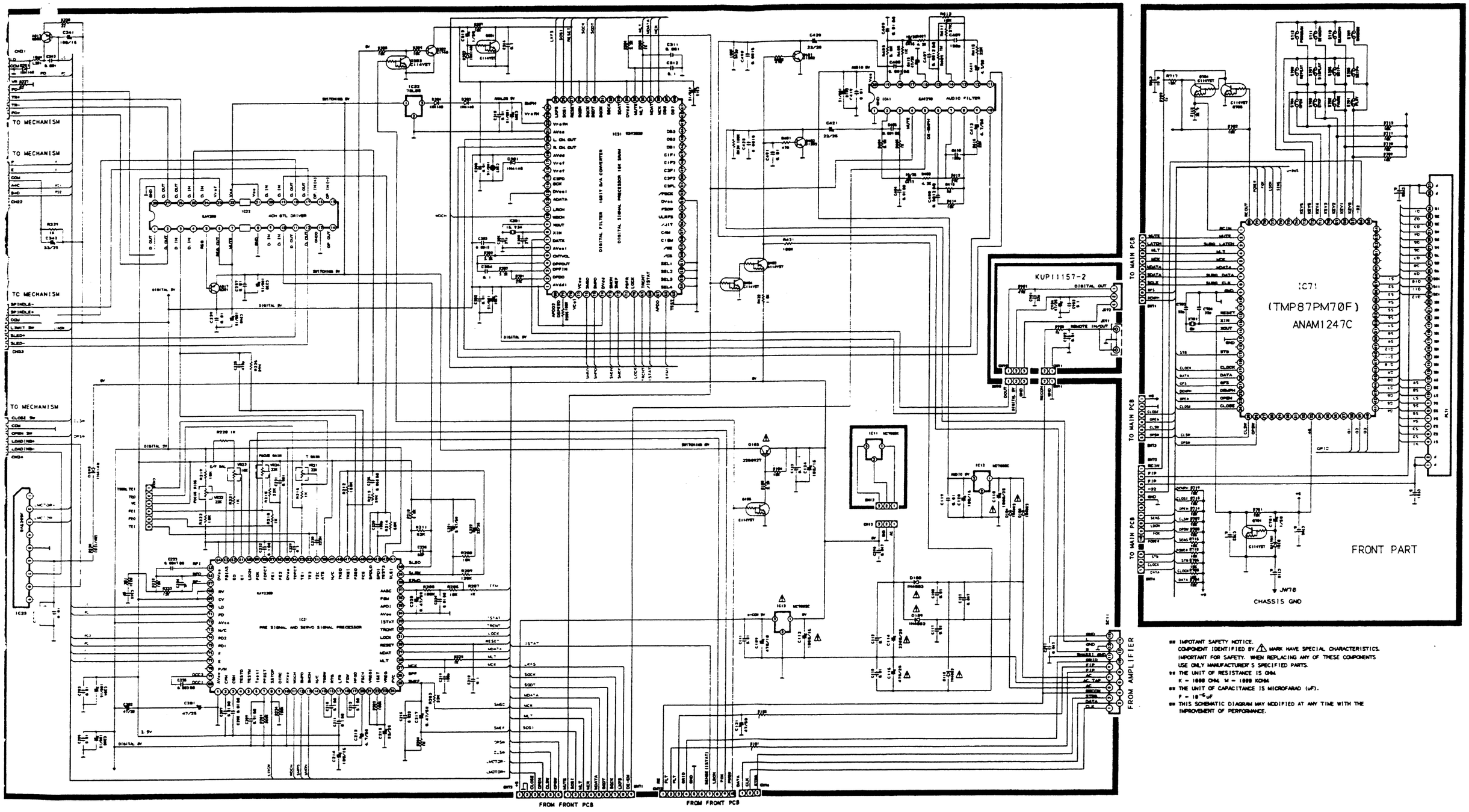






SCHEMATIC DIAGRAM

CD-Player CD4085



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IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS
USE ONLY MANUFACTURER'S SPECIFIED PARTS.

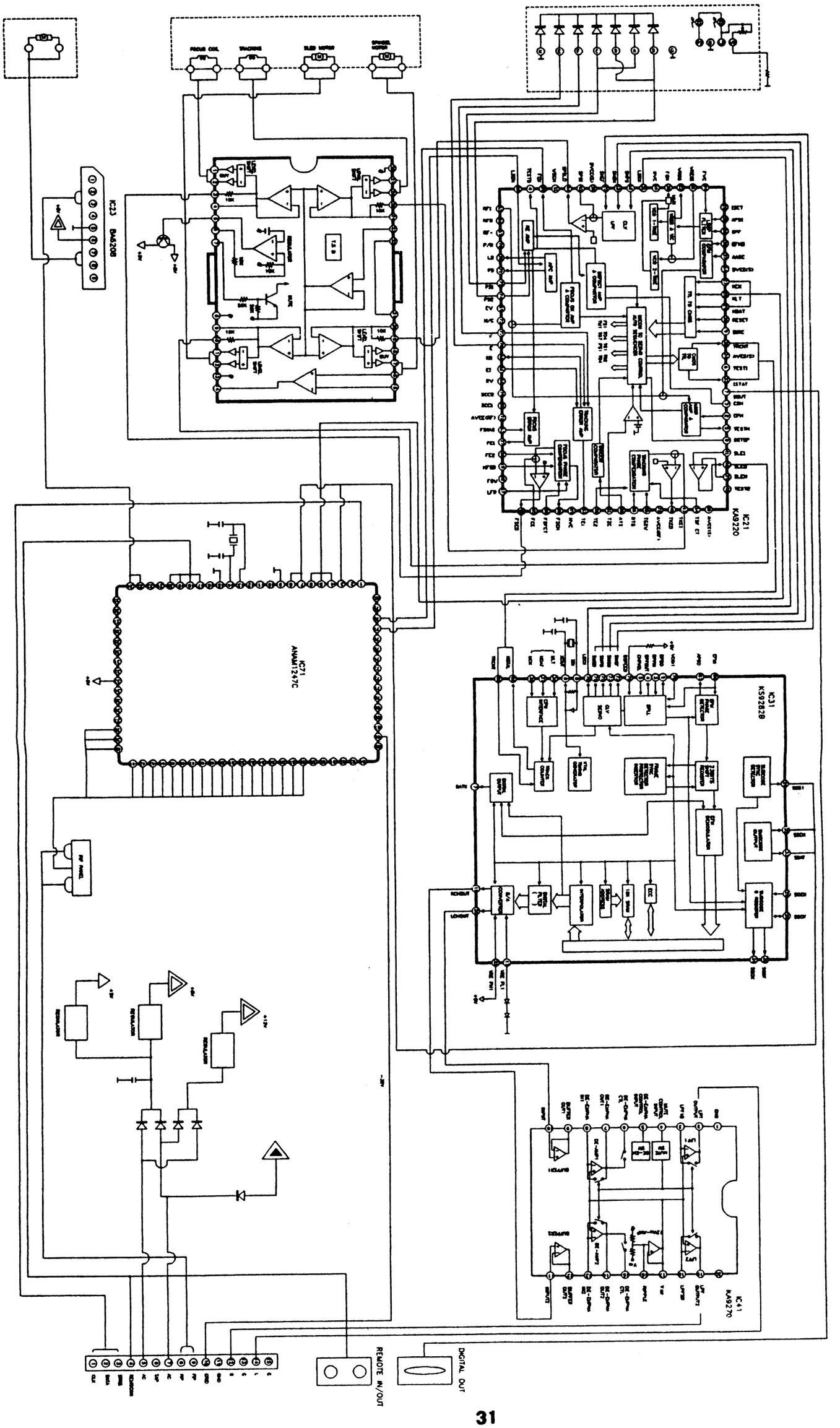
** THE UNIT OF RESISTANCE IS OHM.
K = 1000 OHM, M = 1000 KOHM.

** THE UNIT OF CAPACITANCE IS MICROFARAD (uF).
P = 10^{-6}uF.

** THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WITH THE
IMPROVEMENT OF PERFORMANCE.

BLOCK DIAGRAM

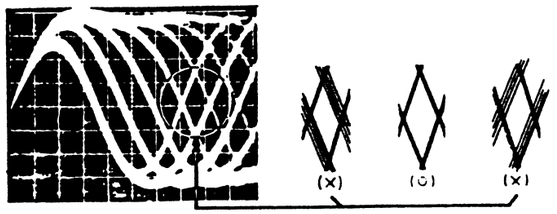
CD-Player CD4085

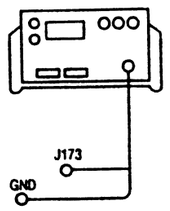


MEASUREMENTS AND ADJUSTMENTS

FOCUS OFF SET ADJUSTMENT

1. Test equipment connection is shown in Fig 1.1
2. Play the test disc.
3. Adjust (VR22 so that the eye pattern of RF Signal is open widest. (Fig 1.2)

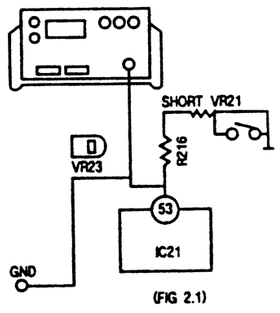




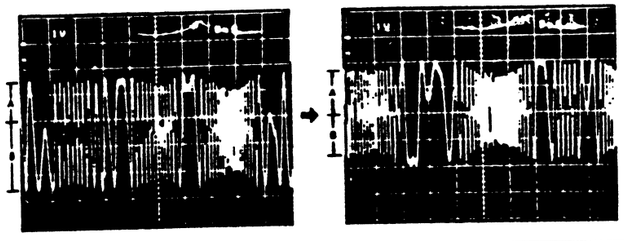
(FIG 1.1)

E/F BALANCE ADJUSTMENT

1. Position the baseline trace of the oscilloscope to the center horizontal graticule line.
   Oscilloscope setting: VOLT 1V/Div
   SWEEP 2msec/Div
2. Turn on the power switch and play the track 1 of test disc.
3. Connect the oscilloscope to R216 (Pin 53 of the IC 21) (See Fig 2.1).
4. Short the VR21 Turn Fully clockwise, adjust the VR23 so that A=B (See Fig 2.2).
   Oscilloscope setting: VOLT 1V/Div
   SWEEP 5msec/Div
   INPUT COUPLING.....DC
5. When the F.L.T displays 00:00.., press the play button and repeat procedure.
6. After adjustment, VR23 is center.

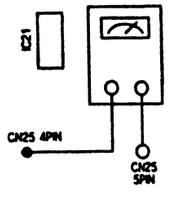


(FIG 2.1)



FOCUS GAIN ADJUSTMENT

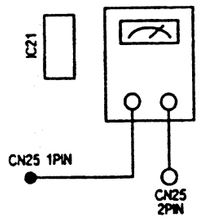
1. Test equipment connection is shown in Fig 3.
2. Play the test disc.
3. Adjust VR24 until monitor level at VTVM becomes 200 mV. (AC)



(FIG. 3)

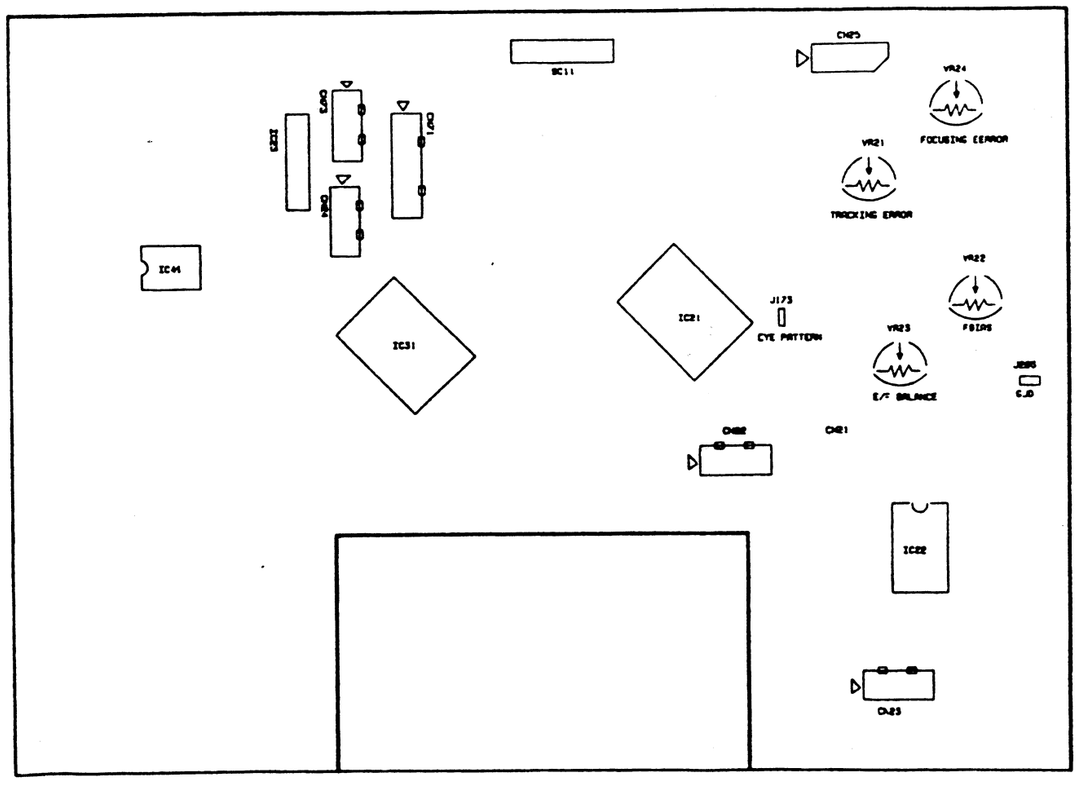
TRACKING GAIN ADJUSTMENT

1. Test equipment connection is shown in Fig 4.
2. Play the test disc.
3. Adjust VR21 until monitor level VTVM becomes 150mV. (AC)



(FIG. 4)

■ ADJUSTMENT POINT



KS9282B (DSP + DAC)

PIN No.	SYMBOL	I/O	DESCRIPTION
1	AVDD1		Analog Vcc1
2	DPDO	O	Charge pump output for master PLL
3	DPFIN	I	Filter input for master PLL
4	DPFOUT	O	Filter output for master PLL
5	CNTVOL	I	VCO control voltage for master PLL
6	AVSS1		Analog Ground 1
7	DATX	O	Digital audio output
8	XIN	I	X-tal oscillator input
9	XOUT	O	X-tal oscillator output
10	WDCH	O	Word clock of 48 bit/SLOT (Normal speed=88.2KHz, Double speed=176.4KHz)
11	LRCH	O	Channel clock of 48 bit/SLOT (Normal speed=44.1KHz, Double speed=88.2KHz)
12	ADATA	O	Serial audio data output of 48 bit/SLOT (MSB first)
13	DVSS1		Digital Ground 1
14	BCK	O	Audio data Bit clock for 48 bit/SLOT (Normal speed=2.1168MHz, Double speed=4.2336MHz)
15	C2PO	O	C2 pointer for output audio data
16	VREFL2	I	Input terminal 2 of reference voltage "L" (Floating)
17	VREFL1	I	Input terminal 1 of reference voltage "L" (GND Connection)
18	AVDD2		Analog VCC2
19	RCHOUT	O	Right-Channel audio output through D/A Converter
20	LCHOUT	O	Left-Channel audio output through D/A converter
21	AVSS2		Analog Ground 2
22	VREFH1	I	Input terminal 1 of reference voltage "H" (VDD connection)
23	VREFH2	I	Input terminal 2 of reference voltage "H" (Floating)
24	EMPH	O	Emphasis/Non-Emphasis Output ("H": Emphasis)
25	LKFS	O	The Lock Status output of frame sync
26	SOS1	O	Output of subcode sync signal (S0 + S1)
27	RESET	I	System reset at "L"
28	SQEN	I	SQCK I/O Control ("L": Internal CK, "H": external CK)
29	SQCK	I/O	Clock for output Subcode-Q data
30	SQDT	O	Serial output of Subcode-Q data
31	SQOK	O	The CRC check result signal output of subcode-Q
32	SBCK	I	CLOCK for output subcode-Q data
33	SDAT	O	Subcode serial data output
34	DVDD1		Digital Vcc1
35	MUTE	I	Mute control input ("H": Mute ON)
36	MLT	I	Latch Signal Input from Micom
37	MDAT	I	Serial data input from Micom
38	MCK	I	Serial Clock input from Micom
39	DB8	I/O	SRAM data I/O Port 8 (MSB)
40	DB7	I/O	SRAM data I/O Port 7
41	DB6	I/O	SRAM data I/O Port 6
42	DB5	I/O	SRAM data I/O Port 5
43	DB4	I/O	SRAM data I/O Port 4
44	DB3	I/O	SRAM data I/O Port 3
45	DB2	I/O	SRAM data I/O Port 2
46	DB1	I/O	SRAM data I/O Port 1 (LSB)
47	C1F1	I/O	Monitoring output for C1 error correction (RA1)
48	C1F2	I/O	Monitoring output for C1 error correction (RA2)
49	C2F1	I/O	Monitoring output for C2 error correction (RA3)
50	C2F2	I/O	Monitoring output for C2 error correction (RA4)
51	C2FL	I/O	C2 decoder flag (High: When the processing C2 code is impossible correction state) (RA5)
52	/PBCK	I/O	Output of VCO/2 (Normal speed=4.3218MHz, Double speed =8.6436MHz) (RA6)
53	DV_{SS2}		Digital Ground 2
54	FSDW	I/O	Unprotected frame sync (RA7)
55	ULKFS	I/O	Frame sync protection state (RA8)
56	/JIT	I/O	Display of either RAM overflow or underflow for ±4 frame Jitter margin (RA9)
57	C4M	I/O	Only monitoring signal (Normal playback: 4.2336MHz) (RA10)
58	C16M	I/O	16.9344MHz signal output (RA11)
59	/WE	I/O	Terminal for test
60	/CS	I/O	Terminal for test
61	SEL1	I	Mode Selection Terminal 1 (H:33.8688MHz, L:16.9344MHz)
62	SEL2	I	Mode Selection Terminal 2 (H:APLL L:DPLL)
63	SEL3	I	Mode Selection Terminal 3 (H: CD ROM L:CDP)
64	SEL4	I	Mode Selection Terminal 4 (L: Internal SRAM)
65	TEST	I	Test Terminal (L=Normal operating state)
66	EFMI	I	EFM Signal Input
67	APDO	O	Charge Pump output for analog PLL
68	/ISTAT	O	The internal status output
69	TRCNT	I	Tracking counter input signal
70	LOCK	O	Output signal of LKFS Condition sampled PBFR/16 (If LKFS is "H", Lock is "H" If the LKFS is sampled "L" at least 8 times by PBFR/16, Lock is "L")
71	PBFR	O	Write frame clock (Lock: 7.35KHz)
72	SMEF	O	LPF time constant control of the spindle servo error signal
73	SMON	O	ON/OFF control signal for spindle servo
74	DV_{DD2}		Digital Vcc 2
75	SMPD	O	Spindle Motor drive (Rough control in the CLV-S mode Phase control in the CLV-P mode)
76	SMSD	O	Spindle Motor drive (Velocity control in the CLV-P mode)
77	VC_{OO1}	O	Vco output signal (When the state is lock by means of PBFR, it is 8.643MHz)
78	VC_{OII}	I	VCO input signal
79	DSPEED	I	Double speed mode control (H:Normal Speed, L:Double Speed)
80	APDO2	O	Analog PLL Charge Pump output for Double Speed mode

KA9220B (RF + SERVO AMP)

PIN No.	SYSTEM	DESCRIPTION
1	AVEE (R)	Analog negative power supply input pin for RF part
2	CPH	Capacitor connection pin of mirror hold.
3	CBH	Capacitor connection pin of defect bottom-hold
4	TESTD	Defect test pin
5	TESTM	Mirror test pin
6	Tout1	Input pin for test
7	PFSET	Peak frequency setting pin for focus, tracking compensation and fc (cut off frequency) of CLV LPF.
8	SSTOP	Check the position pin of pick-up whether inside or not.
9	DIRC	Direct 1 Track jump Control Pin
10	AVCC (S)	Analog positive power supply input pin for SERVO part.
11	WDCH	Auto-sequencer clock-input pin (Normal speed=88.2KHz, Double speed=176.4KHz)
12	SMPD	Connection pin of DSP SMPD
13	SMON	Connection pin of DSP SMON, spindle servo ON at "H"
14	N/C	No connection pin
15	TGSW	Providing time constant to change the high frequency tracking gain
16	RTG	Capacitor connection pin to switch the tracking gain of high frequency
17	LFR	Capacitor connection pin to perform rising low bandwidth of focus servo loop
18	FSW	High frequency gain of focus servo loop can be changed by FS3 switch ON or OFF
19	HFGD	Reducing high frequency gain with capacitor connected between pin 18 and pin 19.
20	FSCH	Time constant external pin to generate focus search waveform
21	VREGI	External regulator voltage input pin for VCO
22	ISET	Determine the peak value of focus search, track jump and SLED kick
23	VREG	3.5V Regulator output pin
24	FVC	Pin connected external resistor to adjust free running frequency of VCO
25	SMEF	Providing an external LPF time constant of CLV SERVO Loop
26	BPE	Providing time constant for Loop filter of VCO
27	MCK	Clock input pin from micom
28	MLT	Latch input pin from micom
29	MDAT	Data input pin from micom
30	RESET	Reset input pin from micom, reset at "L"
31	LOCK	Pin for operation of the sled runaway prevention function at "L"
32	TRCNT	Track count output pin
33	ISTAT	Internal status output pin
34	AVEE (S)	Analog negative power supply input pin for SERVO part
35	APDI	Input pin of DSP phase comparison output (PHAS)
36	FBM	Output pin of analog VCO Normal speed=8.64 MHz, Double speed=17.28MHz
37	AASC	Auto Asymmetry control input pin
38	EFMO	EFM comparator output pin
39	SLEN	Non-inverting input pin of SLED SERVO amplifier
40	SLEO	Output pin of SLED SERVO amplifier
41	SLEI	Inverting input pin of SLED SERVO amplifier
42	TEST2	Test input pin to change speed mode Normal speed="H", Double speed="L"
43	SPDI	Inverting input pin of spindle servo amplifier
44	SPDLO	Spindle servo amplifier output pin
45	FCE	Inverting input pin of focus servo amplifier
46	FSEO	Output pin of focus servo amplifier
47	TKEI	Non-inverting input pin of tracking servo amplifier
48	TKEO	Output pin of tracking servo amplifier
49	N/C	No connection
50	ATS	Anti-shock input pin
51	TZC	Tracking Zero Crossing input pin
52	TE2	Tracking Error Servo input pin
53	TE1	Output pin of tracking Error Amplifier
54	TDFCT	Capacitor Connection pin for Defect Compensation of tracking servo
55	DVCC (S)	Digital positive power supply input pin for servo part
56	FE2	Focus error servo input pin
57	FE1	Output pin of focus error Amplifier
58	FDFCT	Capacitor connection pin for defect compensation of focus servo
59	FOK	Output pin of Focus ok comparator
60	LDON	Laser diode ON/OFF control pin
61	EI	Feedback input pin of E I-V amplifier
62	EO	Output pin of E I-V Amplifier
63	FBIAS	Bias pin of non-inverting input of focus error amplifier
64	DVEE (S)	Digital negative power supply input for servo part
65	RFI	Output Signal of RF summing amplifier is inputed through capacitor
66	RFO	Output pin of RF summing amplifier
67	RF-	Inverting input pin of RF summing amplifier
68	RV	Output pin of (AVCC + AVEE)/2 Voltage
69	CV	Bias input pin of Center Voltage buffer
70	LD	Output pin of APC amplifier
71	PD	Input pin of APC amplifier
72	AVCC (R)	Analog positive power supply input pin for RF part
73	N/C	No connection
74	PD2	Inverting input pin of RF I-V AMP2
75	PD1	Inverting input pin of RF I-V AMP1
76	F	Inverting input pin of F I-V AMP
77	E	Inverting input pin of E I-V AMP
78	P/N	Selecting P-sub/N-sub of Laser diode
79	DCC2	Defect bottom-hold output is inputed through capacitor
80	DCC1	Output pin of defect bottom-hold

IC31: ANAM1249T

PIN No.	SYMBOL	I/O	DESCRIPTION
1, 25	V_{DD}	I	V_{DD}, 5V ±10%
2~5	KEY0~KEY3	I	KEY METRIX INPUT
98~100	KEY4~KEY9	O	KEY METRIX OUTPUT
10, 13	SCK1, SI1, INT3	I	FQ DISPLAY DATA, CLOCK, STROBE
14~17	AIN0~AIN3	I	AREA OPTION
21	AIN7	I	STEREO INDICATOR INPUT
20	AIN6	-	SIGNAL DETECTOR
18	AIN4	-	KOREA MODE ZIG PORT
22, 30	V_{SS}	I	DEVICE PORT
23	VASS	I	ANALOG DEVICE PORT
24	VAREF	I	REFERENCE VOLT INPUT
26	STOP MODE	I	MEMORY H/L
27	TEST	I	N.C (GND)
28	XTIN	I	32.768KHz CRYSTAL TIME OPERATOR
29	XTOUT	O	
31	X IN	I	8.0MHz CRYSTAL μ-COM OPERATOR
32	X OUT	O	
33	RESET	I	RESET SIGNAL INPUT
34	P10 (INT0) REMOTE IN	I	REMOTE CONTROL SIGNAL INPUT
35	INT1 REMOTE OUT	O	REMOTE CONTROL SIGNAL OUTPUT
36	INT2	I	RDS START INPUT
7	SCK2	I	RDS CLOCK INPUT
8	SI2	I	RDS DATA INPUT
48	P06	O	MUTE OUTPUT
42	P00~P03	I	DATA IN PLL IC CONTROL
43	P00~P03	I	CE PLL IC CONTROL
44	P00~P03	O	CLOCK PLL IC CONTROL
45	P00~P03	O	DATA OUT PLL IC CONTROL
50	V_{KK}	-	-30V
51~66	G16~G0	O	FIP GRID DRIVE OUTPUT
67~89	S6~S26	O	FIP SEGMENT DRIVE OUTPUT

μ-COM IC(ANAM1250D)

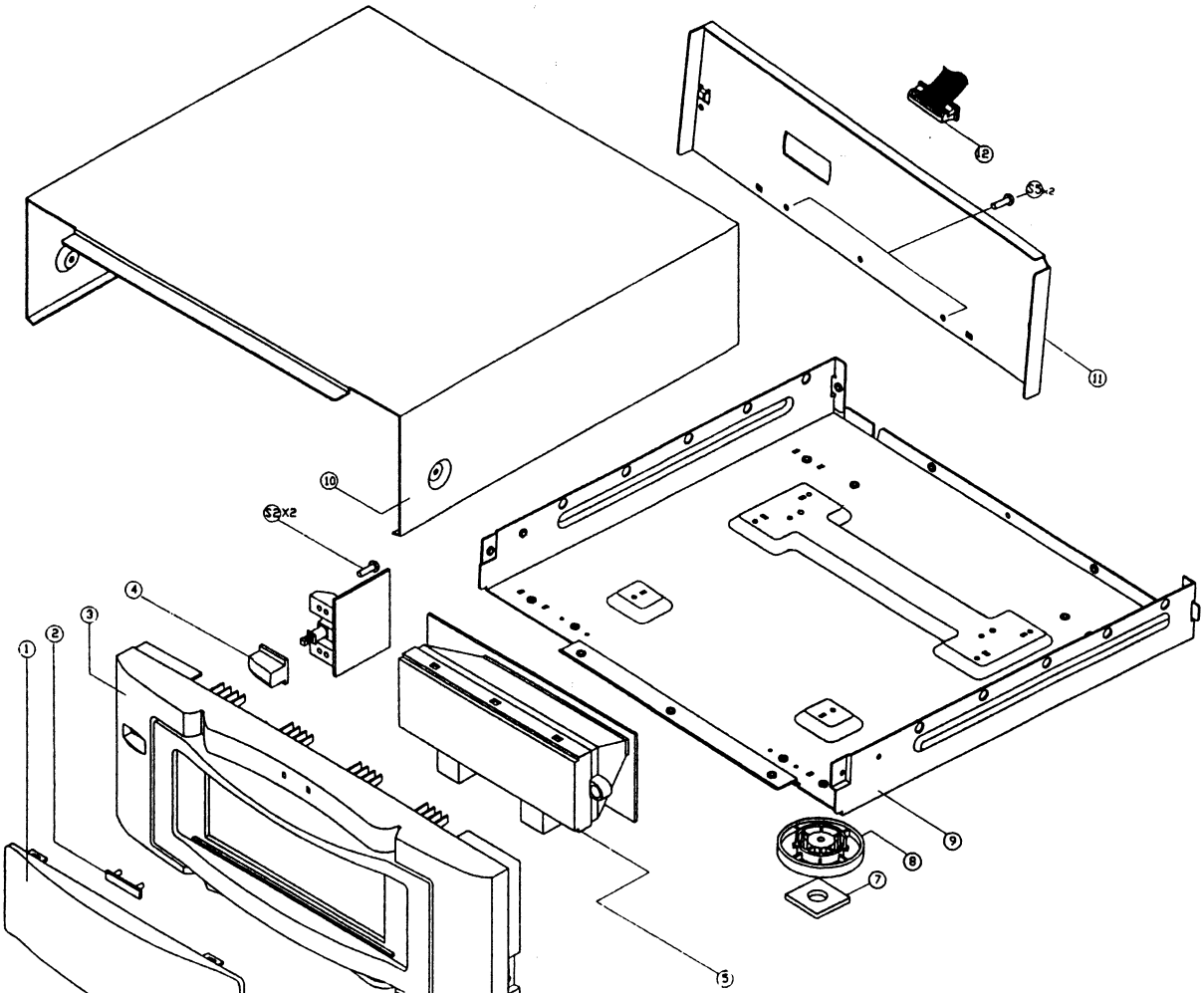
PIN No.	SYMBOL	IO	DESCRIPTION
40~43	P20~P23	I	KEY SCAN INPUT
44, 1, 2	P71~P73	O	KEY SCAN OUT
3	DATA	O	SERIAL DATA OUTPUT
4	CLK	O	SERIAL CLK OUTPUT
5	STB	O	SERIAL STROBE OUTPUT
6	REMO-O	O	REMOTE OUTPUT
7	MUTE	O	LINE MUTE
9	REPEAT	O	REPEAT LED DISPLAY
10	DOL-B	O	DOLBY-B OUTPUT
11	DOL-C	O	DOLBY-C OUTPUT
13	PAUSE	O	PAUSE LED DISPLAY
14	F-PLAY	O	FOR-PLAY LED DISPLAY
15	R-PLAY	O	REV-PLAY LED DISPLAY
16	REC	O	REC ON/OFF OUTPUT
17, 18	VSS	-	GND
20	RESET	I	RESET CONTROL PORT
21, 22	X1, 2	-	CRYSTAL IN/OUT PORT
23	MODE	O	REV-MODE LED DISPLAY
24	SOL	I	DECK SOLENOID CONTROL
25	MOTOR	I	DECK MOTOR CONTROL
26	REC-F	I	DECK FOR-REC SW DETECTOR
27	CL-MOT	O	LOADING CLOSE MOTOR CONTROL
28	OP-MOT	O	LOADING OPEN MOTOR CONTROL
29	PACK	I	DECK PACK SW DETECTOR
30	PLAY	I	DECK PLAY SW DETECTOR
31	REC-R	I	DECK REV-REC SW DETECTOR
32	HALL	I	DECK HALL IC DATA INPUT
33	OP-SW	I	LOADING OPEN SW DETECTOR
35	CL-SW	I	LOADING CLOSE SW DETECTOR
36	TPS	I	TPS DETECT PORT
37	REMO-IN	I	REMOTE INPUT PORT
39	V_{DD}	-	V_{DD} +5V

IC71 (μ-COM) ANAM 1247C

PIN No.	SYMBOL	I/O	DESCRIPTION
1	RCIN	I	REMOCON data input
2	MUTE	O	MUTE signal output
3	SUBQ LATCH	I	Sub code sync signal (S0+S1)
4	MLT	O	Latch signal output
5	MCK	O	Serial Clock output
6	MDATA	O	Serial data output
7	SUBQ DATA	I	Serial input of Subcode Q data
8	SUBQ CLK	I/O	Clock for output subcode Q data
9	GND	-	
10		-	Non connection
11		-	Non connection
12	RESET	-	Reset port
13	XIN	I	Ceramic oscillator input. 8MHz
14	XOUT	O	Ceramic oscillator output
15	GND	-	
16		-	Non connection
17	STB	I	Strobe input from DECK
18		-	Non connection
19	CLOCK	I	Clock input from DECK
20	DATA	I	Data input from DECK
21	GFS	I	The Lock Status input of fram sync
22	DEMPH	O	Emphasis/Non Emphasis output ("H": Emphasis)
23	OPEN	O	Loading Motor open output
24	CLOSE	O	Loading Motor close output
25	CLSW	I	Close limit switch
26	OPSW	I	Open limit switch
27~32		-	Non connection
34~37		-	Non connection
38~49	G1~G12	O	Grid output data
50~58	S9~S1	O	Segment output data
59~65		-	Non connection
66	Vp	-	FLT power port (-32V)
67~73	KEY0~KEY7	-	Key read input port
76	SENS	I	The internal status input from DSP
77	LDON	O	Laser diode ON/OFF control port
78	FOK	I	Focus ok comperator pin
79	CD POWER	O	Power ON/OFF switch control port
80	RCOUT	O	Remocon data output

KA9258D (MOTOR DRIVER)

No.	SYMBOL	I/O	DESCRIPTION
1	DOL1	O	DRIVE OUTPUT
2	DOL2	O	DRIVE OUTPUT
3	DIL1	I	DRIVE INPUT
4	DIL2	I	DRIVE INPUT
5	REG	-	REGULATOR
6	VREG	O	VOLTAGE REGULATOR
7	MUTE		MUTE
8	GND1	-	GND
9	DI2.1	I	DRIVE INPUT
10	DI2.2	I	DRIVE INPUT
11	DO2.1	O	DRIVE OUTPUT
12	DO2.2	O	DRIVE OUTPUT
13	GND2	-	GND
14	OPOUT	O	OP AMP OUTPUT
15	OPIN (-)	I	OP AMP INPUT (-)
16	OPIN (+)	I	OP AMP INPUT (+)
17	DO3.1	O	DRIVE OUTPUT
18	DO3.2	O	DRIVE OUTPUT
19	DI3.1	I	DRIVE INPUT
20	DI3.2	I	DRIVE INPUT
21	Vcc1	-	Voltage Regulator (+8V)
22	Vcc2	-	Voltage Regulator (+8V)
23	VREF	-	2.5V BIAS REQULATOR
24	DI1.1	I	DRIVE INPUT
25	DI1.2	I	DRIVE INPUT
26	DO1.1	O	DRIVE OUTPUT
27	DO1.2	O	DRIVE OUTPUT
28	GND3	-	GND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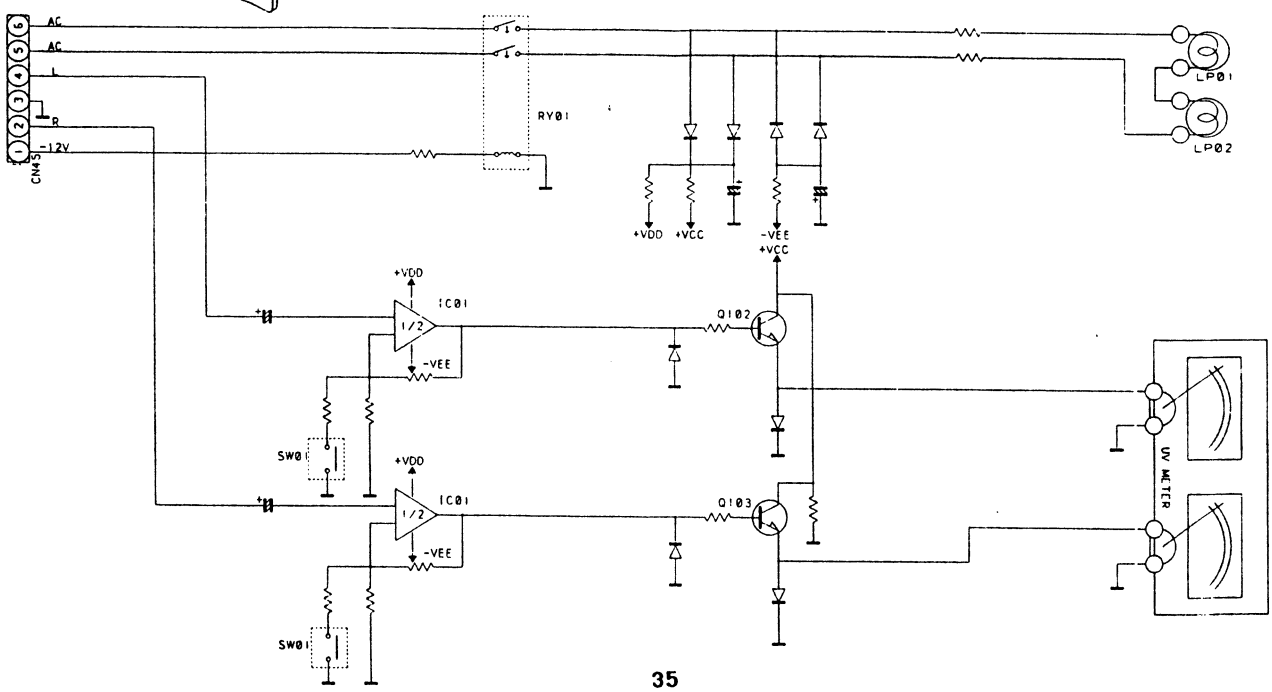
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RY01
LP01
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+VDD
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1/2
-VEE
Q102
SW01
+VDD
IC01
1/2
-VEE
Q103
SW01
UV METER

SCHEMATIC DIAGRAM VU-Meter VU4085